PERSPECTIVE



Understanding China's political will for sustainability and conservation gains

Hubert Cheung^{1,2,3} | Yutong Phoenix Feng⁴ | Amy Hinsley^{5,6} | Tien Ming Lee⁷ | Hugh P. Possingham³ | Stephen N. Smith⁸ | Laura Thomas-Walters⁹ | Yifu Wang¹⁰ | Duan Biggs^{2,11,12}

¹Department of International Studies, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Japan: ²School of Earth and Sustainability. Northern Arizona University, Flagstaff, Arizona, USA; 3 Centre for Biodiversity and Conservation Science, School of Biological Sciences, University of Queensland, St. Lucia, Queensland, Australia; ⁴Nicholas School of the Environment, Duke University, Durham, North Carolina, USA; ⁵Department of Zoology, University of Oxford, Oxford, UK; 6Oxford Martin Program on the Illegal Wildlife Trade, Oxford Martin School, University of Oxford, Oxford, UK; ⁷State Key Laboratory of Biological Control and Schools of Life Sciences and Ecology, Sun Yat-sen University, Guangzhou, China; ⁸Department of Political Science, Carleton University, Ottawa, Ontario, Canada; 9Biological and Environmental Sciences, University of Stirling, Stirling, UK; 10School of Biological Sciences, University of Hong Kong, Hong Kong SAR, China; 11Centre for Complex Systems in Transition, School of Public Leadership, Stellenbosch University. Stellenbosch, South Africa and ¹²Resilient Conservation, Centre for Planetary Health and Food Security Griffith University, Nathan, Queensland, Australia

Correspondence

Hubert Cheung

Email: h.cheung@ugconnect.edu.au

Funding information

Australian Research Council, Grant/Award Number: DE 160101182; Japan Society for the Promotion of Science; Kadas Senior Research Fellowship; Lee Shau Kee Foundation

Handling Editor: Shuai Wang

Abstract

- 1. Political will is a critical determinant of the success or failure of environmental policies and interventions. Harnessing the political will necessary to implement environmental solutions can be challenging because environmental priorities may compete with other societal interests in policymaking.
- 2. Environmental solutions are more politically feasible if fundamentally aligned with the core interests of key policymakers. Understanding the political agendas of decisionmakers enables conservationists to identify where political will already exists, and allows environmental objectives to piggyback on the motivation to deliver results.
- 3. In this paper, we explore the core interests of the Chinese leadership to uncover opportunities to leverage Beijing's political will for sustainability and conservation gains. China's growing influence on ecosystems and natural resource use both within and beyond its borders makes an analysis of its leadership's political will valuable and timely.

KEYWORDS

Beijing, Chinese leadership, development strategy, geopolitics, People's Republic of China, political agenda, political feasibility, sustainable development

INTRODUCTION

Conservation aims to improve ecological outcomes. The new Kunming-Montreal Global Biodiversity Framework was adopted in December 2022 at the 15th Convention on Biological Diversity Conference of the Parties (COP15) co-hosted by China and Canada, and has the potential to change the trajectory of global biodiversity loss (https://www.cbd.int/doc/c/e6d3/cd1d/ daf663719a03902a9b116c34/cop-15-l-25-en.pdf). Ensuring that policies and actions are effective is critical; understanding and

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2022 The Authors. People and Nature published by John Wiley & Sons Ltd on behalf of British Ecological Society.

considering the complex human dimensions which determine the effectiveness of conservation strategies can reap tangible ecological benefits (Bennett et al., 2017).

One such human dimension is political will, which is necessary at every stage of the policy cycle and a lack of which is often a factor when policies fail (Lassa et al., 2019; Post et al., 2010). It is critical for success in conservation, be it for international agreements like the Montreal Protocol or natural resource management at local scales (Carbonetti et al., 2014; DeSombre, 2000; Sale, 2015). Despite its importance, political will has been described as 'slipperiest concept in the policy lexicon' (Hammergren, 1998) and tends to be discussed ambiguously, with political scientists only having defined the concept precisely in recent years (Pham et al., 2019; Treadway, 2011). Post et al. (2010) defined political will as 'the extent of committed support among key decision makers for a particular policy solution to a particular problem'. It involves four essential components: '(1) a sufficient set of decision makers (2) with a common understanding of a particular problem on the formal agenda (3) is committed to supporting (4) a commonly perceived, potentially effective policy solution' (Post et al., 2010). In this paper, we use Treadway's (2011) shorthand definition to refer to political will as 'the motivation to engage in strategic, goal-directed behavior that advances the personal agenda and objectives of the actor that inherently involves the risk of relational or reputational capital'.

Garnering political will for sustainable development was identified as a focus action area for the United Nations Sustainable Development in the 21st Century (SD21) project (United Nations, 2012). Amassing sufficient political will requires committed leadership (Sale, 2015) with adequate intent and motivation at individual or collective levels among those with political or decision-making power (Brinkerhoff, 2010; Thompson & Staddon, 2020). Garnering political will for conservation can be challenging because environmental priorities compete with economic, social and political interests, which can result in ineffective or partial adoption of scientific advice in management (Cash, 2016; Cooke et al., 2013; Daw & Gray, 2005). Understanding the core interests and priorities of key policymakers from the outset can improve tradeoff assessment and decision-making by conservationists, who must act strategically because of limited resources, scientific uncertainty and feasibility (Bottrill et al., 2008; McDonald-Madden et al., 2008). Political will can be quantified and measured using various tools developed in recent years (Kapoutsis et al., 2017; Lassa et al., 2019; Pham et al., 2019). By considering the priorities of key policymakers, conservationists can more accurately gauge the likelihood of successful policy adoption and implementation (Gilabert & Lawford-Smith, 2012), and uncover opportunities to leverage existing political will to achieve environmental objectives.

In this paper, we examine the Chinese government's core interests as a case study to uncover opportunities to leverage Beijing's political will for sustainability and conservation gains. The People's Republic of China has in recent decades become increasingly influential in global affairs, including sustainability and environmental issues. Grumbine and Xu (2011) postulated that 'an environmentally healthy and secure

China can benefit the world, and this will only become more apparent over the course of the 21st century'. China's rapid economic development and geopolitical ascent has led to the immense scale of its influence on ecosystems and natural resource use both within and beyond its borders (Grumbine, 2007). China is the world's largest emitter of greenhouse gases (Jones, 2007), and the Belt and Road Initiative is the largest infrastructure and development project in human history, with proportionately numerous environmental risks (Hughes et al., 2020). China is also contributing to emerging ecological risks associated with deep-sea mining development and arctic shipping (Mariia, 2019; Miller & Ruiz, 2014; Van Dover et al., 2017). The scale and reach of China's environmental footprint—and global geopolitical influence—is such that an exploration of its leadership's political agenda and political will is valuable and timely for conservation.

2 | CHINA'S CENTRALIZED ENVIRONMENTAL GOVERNANCE

In the seven decades since the Communist Party of China (CPC) established the modern Chinese state, China has experienced political revolution, ideological upheaval and sweeping reforms which facilitated unprecedented economic growth. Serious environmental challenges have accompanied China's rapid development and global ascent, including surpassing the United States as the largest greenhouse gas emitter (Lin et al., 2018), demand for illegally traded wildlife (Ye et al., 2020), and myriad ecological risks associated with the Belt and Road Initiative (Hughes et al., 2020). Today's China is governed centrally by the CPC, whose leaders are committed to delivering on the party's strategic priorities (Rudd, 2018; Shambaugh, 2018). Guided by President Xi Jinping's vision for China on the world stage, China has emerged as a global superpower and is reshaping global geopolitics, security and economics (Economy, 2018; Rudd, 2018).

China's top-down governance model extends to environmental governance. The Chinese government enshrined its commitment to building an ecological civilization (生态文明, shengtàiwénmíng) into its constitution in 2012, providing top-down direction for policy and action at all levels (Hansen et al., 2018; Wei et al., 2020). Authority related to environmental matters is concentrated in a few executive agencies, including the Ministry of Natural Resources (manages land, forests, grasslands, wetlands and water resources and runs the National Forestry and Grassland Administration) and the Ministry of Ecology and Environment (oversees environmental protection and unifies previously fragmented supervision and enforcement responsibilities) (Wang, 2018). Public participation is generally limited to scientific and technocratic experts and environmental NGOs; participation beyond these groups is typically only expected through state-led policy implementation (Aikawa, 2017; Gilley, 2012). Beijing makes use of its top-down governance to respond centrally to environmental problems quickly, enact sweeping measures and invest huge sums of money in solutions (Gilley, 2012; Miller-Rushing et al., 2017). For example, without having to fear public political

backlash the Chinese government has been able to rapidly introduce low-carbon initiatives (Lo, 2015).

The ability of China's top-down environmental governance model to deliver positive ecological outcomes is dependent on complex circumstances, including whether environmental objectives complement larger political goals. For instance, the major economic reforms in the 1970s led to decades of rapid development, but caused devastating habitat loss and fragmentation that nearly drove the giant panda Ailuropoda melanoleuca to extinction (Wei et al., 2015). In response, the central government created 67 panda reserves covering half the species' habitat (People's Republic of China, 2015) and introduced national initiatives to increase forest cover and improve habitat connectivity. These measures facilitated the panda's recovery, now down-listed on the IUCN Red List from 'Endangered' to 'Vulnerable'. The panda is an umbrella species, and investing in its conservation has benefited over a hundred other threatened and endemic species (Li & Pimm, 2016). The strong political will behind these strategic and committed conservation efforts can at least partly be attributed to the panda's status as China's 'national treasure' (Wei et al., 2015). Another high-profile example of China's ability to deliver tangible outcomes when environmental objectives are aligned with its core political interests is the success of measures to improve air quality for the 2008 Beijing Olympic Games. Beijing's air pollution problems prior to hosting the event are well documented, but the political will to ensure clean air for the games prompted aggressive measures before and during the event to target pollution from regional industry, traffic and construction (Wang et al., 2009, 2010; Xing et al., 2011). Although the socioeconomic costs of such strict controls meant that they could not be sustained, this example illustrates the potential for leveraging Beijing's political will to deliver remarkable environmental outcomes.

3 | BEIJING'S POLITICAL WILL TO DELIVER ON CORE INTERESTS

To reap sustainability and conservation gains from an understanding of political will among China's leadership, we need a balanced picture of China's core interests. In 2011, the State Council's authoritative White Paper listed China's core interests as:

- State sovereignty;
- National security;
- Territorial integrity and national reunification;
- China's political system established by the Constitution and overall stability; and
- The basic safeguards for ensuring sustainable economic and social development (People's Republic of China, 2011).

The government has since sought to build and deliver on these strategic priorities, which continue to steer and shape Chinese policy decisions today (People's Republic of China, 2019a).

Political scientists and observers have presented independent interpretations of and expanded on these core interests. In essence, Xi's Chinese Dream centers on making China 'prosperous and strong' (Simplified Chinese: 富强, pinyin: *fùqiáng*) again through a coordinated program of national rejuvenation and ascension on the world stage (Zhang, 2019; Zheng & Lye, 2015). In the sections that follow, we thematically discuss examples of conservation objectives that align with Beijing's political agenda wherein conservationists may be able to leverage the Chinese leadership's political will for environmental gains (Table 1).

TABLE 1 Summary of the Chinese leadership's core interests and examples of environmental objectives that can benefit from the political will to deliver on each of these strategic priorities

China's core interests

Ensure that the government remains strong and maintains its power, rule and political legitimacy

Examples of opportunities to pursue relevant environmental objectives

- Reverse the severe environmental degradation that resulted from decades of rapid but unsustainable development
- Emphasis on pursuing sustainable economic and social development to build an ecological civilization
 opens doors to integrate conservation priorities into policy (e.g. 10-year Yangtze River fishing ban)
- Improve food security for a country of nearly 1.4 billion people with promotion of green farming practices and dietary changes
- Tackle illegal wildlife trade and the consumption of wildlife as food in the wake of the recent coronavirus outbreak, which spotlighted serious dangers to public health
- Minimize national security risks by cultivating positive relationships with countries in China's eastern maritime and western territorial peripheries
- Opportunities to build transnational cooperation on environmental issues, including transboundary
 protected areas, cooperative fisheries management and enhanced cooperation in tackling the illegal
 wildlife trade
- Environmental opportunities posed by the BRI, such as the potential to reshape international
 governance structures to ensure that BRI developments are environmentally responsible and to
 establish transnational conservation initiatives
- Solidify ascension in the community of nations and gradually reshape global institutions
- Encouraging China to fill the climate leadership void by strengthening partnerships and collaborations
 with the EU and BRICs nations can allow the Chinese government to assert itself as a credible and
 responsible leader on the global stage
- Develop culturally nuanced strategies to tackle the global illegal wildlife trade, particularly in the aftermath of the COVID-19 pandemic

4 | SUSTAINABILITY AND CHINA'S DEVELOPMENT STRATEGY

The national program of 'reform and opening up' (改革开放, gǎigékāifàng) introduced in the 1970s facilitated decades of rapid economic growth and transformed an impoverished country into a global superpower, although at steep environmental cost (Fu et al., 2007; He, 2009). The CPC recognizes that meeting the citizenry's expectations for quality-of-life improvements, including environmental conditions, is critical to securing its political legitimacy and credibility (Rudd, 2018; Zeng, 2014). Rebuilding regime legitimacy is particularly important for Xi Jinping given China's current socioeconomic issues (Zhao, 2016). This was expressed at the 19th National Congress of the CPC in 2017, where it was declared that the principal 'contradiction' (矛盾, máodùn; Marxist concept referring to social forces which are in constant opposition, stem from the conflicting aspirations of different social classes, and will lead to revolution if left unsolved (Brown, 2012)) facing China today is 'between unbalanced and inadequate development and the people's ever-growing needs for a better life' (People's Republic of China, 2017a).

The government has responded to the public's demands for better environmental governance with tougher environmental laws, stricter enforcement, bureaucratic reforms and various campaigns (Kostka & Zhang, 2018). For instance, recognizing that poor air quality from heavy pollution posed a threat to both public health and the CPC's legitimacy (Holbig & Gilley, 2010; Zeng, 2014), major policy changes were implemented to significantly improve air quality since the 2013 'Air Pollution Prevention and Control Action Plan' (Zheng et al., 2017). Longer term, China's development strategy seeks to build an ecological civilization and foster harmony between people and nature (Wu et al., 2019). Xi's opening remarks at the 2016 Hangzhou G20 summit captured this emphasis on sustainable development (可持续发展, kěchíxùfāzhǎn):

I have said for many times that green mountains and clear water are as good as mountains of gold and silver. To protect the environment is to protect productivity, and to improve the environment is to boost productivity. This simple fact is increasingly recognized by people. (Xi, 2016)

Such narrative should not be overlooked, as top-down narrative framing plays an important role in shaping governance and policymaking in China (Geall & Ely, 2018; Sills et al., 2017). Xi Jinping's political thought on ecological civilization has driven the CPC's embrace of the concept in China's constitution and development strategy in recent years (Chang, 2019; Wei et al., 2020). These are broadcasted through writings and speeches in both domestic (e.g. Xi's speech at the 2018 National Conference on Ecological and Environmental Protection) and international (e.g. Xi's keynote address at COP15) settings. China's increasing emphasis on sustainability in its development strategy demonstrates intent to deliver environmental outcomes.

This top-down political will to develop an ecological civilization is being translated into policy on numerous fronts. This includes the reform of China's protected area system, which has been fragmented in its management with no comprehensive classification of protected areas, no cohesive legal mechanism and conflicting interdepartmental agendas (Xu et al., 2012, 2019). In Xi's report to the 19th National Congress of the CPC, he pledged to 'establish systems for developing and protecting territorial space, improve supporting policies on functional zones, and develop a nature reserves system composed mainly of national parks' (Xi, 2017). In line with this intent, the central government has issued a comprehensive plan to guide the reform of the protected areas system and to mandate implementation by relevant agencies and regional governments (People's Republic of China, 2017b).

How top-down narratives and national mandates guide environmental governance at regional scales can be seen in the Yangtze River delta. Introduced in 2011, the Ecological Conservation Red Line (ECRL) initiative sets out to protect a quarter of China's land area, and has been incorporated into China's revised Environmental Protection Law (Xu et al., 2018). In the Yangtze River delta, 28,995 km² of land has already been been set aside for protection (Gao, 2019). Furthermore, having identified the protection of the Yellow and Yangtze Rivers as critical to China's coordinated development strategy (Xi, 2019; Zhang et al., 2020), the government banned all fishing activity in the Yangtze River basin for 10 years (People's Republic of China, 2019c). Although this measure has come too late for species like the Chinese paddlefish Psephurus gladius, it signals genuine intent to conserve other threatened and endemic species (Ye et al., 2014) and improve the basin's general environmental conditions (Yi et al., 2011; Zhang et al., 2020). The breadth of these measures illustrate Beijing's ability and willingness to take sweeping conservation actions, particularly where integrated into its development agenda.

To illustrate further, decades of logging and deforestation have contributed to large-scale flooding in densely populated areas (Wang et al., 2004), which 'threatens the claim that the state protects the well-being of the nation partly through successful management of water' (Lang, 2002). After devastating floods along the Yangtze River in 1998 killed over 3600 people, affected 240 million people and caused USD \$30 billion in damage, China banned logging in the region despite opposition from regional actors and industry (Lang, 2002). China has continued to expand protections for and efforts to recover native forests in line with its ECRL policy, including its 2015 ban on all commercial logging of native forests (Hua et al., 2018). This example further highlights the potential to integrate environmental objectives into wider political priorities by understanding and considering the political agendas of key policymakers.

5 | SAFEGUARDING FOOD SECURITY AND REDUCING PUBLIC HEALTH RISKS

China has greatly improved agricultural production in the last several decades (Min et al., 2015), largely through unsustainable practices

CHEUNG ET AL. People and Nature

like intensive fertilizer use. However, China's per capita water availability and arable land resources remain well below world averages, resulting in poor food productivity (Grumbine, 2007; Mukhopadhyay et al., 2018; Yu et al., 2016). Food security is further threatened by environmental pollution (Chen, 2007), sprawling urbanization and increasing demand for land, water and carbon-intensive diets like meat (Mukhopadhyay et al., 2018; Poore & Nemecek, 2018). Consequently, food security is a high priority issue for Beijing (Khan et al., 2009), which has already instituted preventative policies like the Red Line arable land protection policy (Mukhopadhyay et al., 2018). However, this is unlikely to be enough to achieve the desired 95% self-sufficiency rate in grain production, especially if soil degradation continues at current rates (Chen, 2007; Mukhopadhyay et al., 2018; Ye & Van Ranst, 2009).

Unsustainable agricultural inputs must be urgently reduced to tackle environmental degradation that threatens future food production, particularly as this would have no detrimental effect on current yields (Fan et al., 2011). To protect food security and maintain political legitimacy, sustained high-level policy support is needed for green farming practices (e.g. manure treatment, better irrigation techniques), strengthened environmental law enforcement and widespread adoption of more sustainable diets (Ghose, 2014; Qian et al., 2018; Yu et al., 2016). China is the world's leading consumer of meat, and behaviour change campaigns encouraging citizens to reduce red meat consumption has an important role to play (Ghose, 2014; Min et al., 2015). This would free land currently used to cultivate livestock grain feed and help achieve the grain self-sufficiency target (Ghose, 2014; Qian et al., 2018).

Illegal and unsustainable wildlife use and trade is a major threat to biodiversity (Cardoso et al., 2021; Fukushima et al., 2021), and COVID-19 has placed the public health risks associated with wildlife consumption (Plowright et al., 2017) in the global spotlight. Although investigations continue (Harrison & Sachs, 2022), the pandemic's origins have been linked to a Wuhan market where wild game (野味, yĕwèi) was sold (Maxmen, 2022). Wildlife crime enforcement in China is weak, with wildlife (including protected species) consumption as delicacies commonplace (Wong, 2019). In response to the outbreak of COVID-19, the Chinese government banned the trade of terrestrial wildlife for food consumption nationwide and urged consumers to avoid eating wild meat (People's Republic of China, 2020a, 2020b), demonstrating again the sweeping measures that Beijing can implement with adequate political will.

China's imposition of a similar wildlife consumption ban during the 2003 SARS outbreak (also linked with wild game consumption) highlights the need for sustained policy commitment (Bell et al., 2004; Liu, 2003). Wild game consumption in China diminished immediately after SARS (Yang et al., 2007); a similar consumption pattern change is likely after the COVID-19 pandemic, presenting an opportunity to foster an endogenous, enduring cultural shift to sustainable food production and diets (Schumacher, 2015). Capitalizing on this will require evidence-based solutions that are more nuanced than blanket bans, which are difficult to enforce and sustain, as shown by the eventual resumption of wild game consumption

after SARS (Wong, 2016). In the short and medium terms, there will likely be considerable political will to invest in mechanisms to reduce threats posed by wildlife consumption and trade, providing conservationists with opportunities to work with public health and food safety experts to address this issue in innovative and integrated ways (Biggs et al., 2021; Campbell et al., 2022).

6 | ENVIRONMENTAL GAINS ALONGSIDE CHINA'S REGIONAL FOREIGN POLICY

China is today taking a more assertive leadership role in global governance, including on environmental issues (Smith, 2018). A major foreign policy priority for Beijing is to maintain stability in its geographical surrounds (Smith, 2019). This includes enhancing China's regional influence, particularly with its terrestrial and maritime neighbours, which has led to heightened regional tensions in recent years (Jain, 2021; Regilme, 2018; Smith, 2021).

Environmental peacebuilding has challenged conventional wisdom, arguing that transboundary cooperation in environmental governance and natural resource management can foster more peaceful relations (Dresse et al., 2019). Although there are significant risks and uncertainties that can destabilize cooperative efforts and exacerbate problems, tensions and conflict between nations do not necessarily disqualify cooperation on environmental issues (Ide, 2018, 2020). Some researchers have argued that cooperation between states in conflict with one another is more feasible for 'low politics' matters like environmental management than for 'high politics' issues like national security (Martin et al., 2011). Researchers have studied the complex conditions and challenges involved in instances where environmental cooperation has occurred amidst conflict (including violent conflict) using examples like collaborative conservation management in the Virunga Massif at the intersection of the Democratic Republic of Congo, Rwanda and Uganda (Martin et al., 2011), Israeli-Palestinian cooperation on water issues at the local level (Reynolds, 2017), and the establishment of transboundary protected areas around the world (Barquet, 2015; Barquet et al., 2014). As geopolitical tensions between China and the West have increased over the last year, 'soft diplomacy' focused on the environment represents a potential opportunity to maintain a politically feasible level of cooperation. Here, we identify three potential avenues to apply environmental peacebuilding in the context of Chinese regional foreign policy in pursuit of win-win solutions that improve both security and environmental outcomes.

Transboundary frontiers are often rich in biodiversity and play a critical role in ecological connectivity; political tensions and instability jeopardize biodiversity conservation in these regions (Liu et al., 2020). Transnational cooperation in conservation and environmental peacemaking mechanisms, including transnational protected area creation, can strengthen diplomatic ties. These are diplomatic tools that can create new negotiation channels, defuse tensions between states and break political deadlock while improving

ecosystem health and management (Mackelworth et al., 2013; Roulin et al., 2017). Transboundary protected areas are not a new concept, and hundreds have been created since they were first conceived as a means of resolving interstate disputes (Barquet et al., 2014). They are an important conservation tool because species habitat ranges seldom coincide with political borders (Vitkalova et al., 2018). For instance, nature reserves along the Sino-Russian border (Xinhua, 2019) will boost Amur tiger *Panthera tigris altaica* and leopard *Panthera pardus orientalis* recovery (Liu & Wang, 2020; Wang et al., 2017, 2018) while strengthening diplomatic relations.

China is a significant source of demand for illegally traded wildlife products from around the world. Improving transnational cooperation in tackling illegal trade will benefit biodiversity and reduce public health risks (Smiley Evans et al., 2020). Inbound trafficking at China's land borders with Myanmar, Vietnam, Russia, Laos, Nepal and Kazakhstan is well-documented, where sheer length poses serious enforcement challenges (Wong, 2019). Mechanisms to improve coordination between enforcement agencies, facilitate intelligence sharing, joint investigations and mutual assistance in case handling are urgently needed (Nijman et al., 2016; Wong, 2019). Beijing has demonstrated a willingness to collaborate with international partners on highly politicized issues like restrictions on the lucrative wildlife farming industry that supplies the traditional Chinese medicine (TCM) trade. For example, in response to a 2012 IUCN World Conservation Congress recommendation to end bear farming in Asia, China co-developed a project with the IUCN Species Survival Commission and international research institutions to study the links between legal bear farming and illegal trade (IUCN, 2012).

Fisheries cooperation in the South China Sea, one of the world's most over-exploited ecosystems, can improve both international relations and environmental outcomes. Presently, a lack of joint fisheries management leads to conflict over resource utilization rights and regional security risks. Illegal, unreported and unregulated fishing threatens ecosystem health and the livelihoods of communities reliant on marine resources (Zhang, 2016, 2018). Competing territorial and maritime claims have led to regional tensions and neglect for collective ecological protection responsibilities (Gregory, 2018; Jiang & Xue, 2015; Teh et al., 2017). Cooperation in fisheries management tends to be less politically sensitive than for other natural resources like oil and gas, and is thus more feasible (Nguyen-Dang, 2012). Cooperative management can take the form of marine protected areas, transnational governance structures and agreements, or joint aquaculture development, all of which can facilitate dialogue and cooperation in other areas of international relations (McManus, 2017; Zhang, 2018).

7 | SUSTAINABILITY IN THE BELT AND ROAD INITIATIVE AND CHINA'S GLOBAL AMBITIONS

The Belt and Road Initiative (BRI; 一带一路, yīdàiyīlù) is the centrepiece of China's foreign policy and global development strategy

(Yu, 2017). It is an ambitious infrastructure development plan that aims to deepen diplomatic ties between China and over 125 countries across Asia, Europe and East Africa (Aoyama, 2016; People's Republic of China, 2019b; Turschwell et al., 2020). While acknowledging the BRI's potential benefits, scientists have also recognized potential threats to the natural environment (Ascensão et al., 2018; Sutherland et al., 2018; Tracy et al., 2017).

The construction of large-scale infrastructure projects is central to the BRI. While these may bring substantial benefits to local economies, they also pose ecological threats. For instance, the various funding pathways and stakeholders involved may pose challenges for the effective implementation of environmental policies (Grumbine, 2018). Expanding transportation infrastructure can cause extensive wilderness area losses with devastating ecological consequences (Laurance et al., 2015; Watson et al., 2016). Largescale transport infrastructure development also increases poachers' access to terrestrial wildlife, spreads invasive species and harms marine habitats (Esmail et al., 2019: Farhadinia et al., 2019: Turschwell et al., 2020). Other environmental impacts from BRI development include land use change, damming and groundwater pumping, mining impacts, habitat degradation, pollution and increased demand for wildlife products (Hinsley et al., 2020; Hughes et al., 2020; Tian et al., 2019).

Although these concerns have rightly been raised, it should be noted that nature conservation is embedded in the BRI development plan (People's Republic of China, 2019b), consistent with the domestic progress China has made in environmental governance and transparency in recent years (Zhang et al., 2016) and its push to improve private sector environmental reporting (Li et al., 2018). With the BRI having been described as the 'Marshall Plan with Chinese characteristics', it is in the interests of China's global ambitions to ensure that BRI developments are environmentally responsible-preferably with a net gain outcome consistent with the Convention on Biological Diversity's 2030 Agenda goals. Doing so would enable China to build its profile as a global environmental leader, in line with the CPC's push for greater soft power in global affairs and in its efforts to reshape international governance structures (Becard & Filho, 2019; Callaghan & Hubbard, 2016; Shambaugh, 2015).

Xi Jinping's assertion that 'green mountains and clear water are as good as mountains of gold and silver' (Xi, 2016) is captured in Beijing's determination to emphasize sustainability in how the BRI is presented globally, with Chinese leaders framing the program in terms of building a 'green, healthy, intelligent and peaceful Silk Road' (People's Republic of China, 2016). The potential to establish and strengthen transboundary conservation—and even raise global environmental standards—should be explored (Huang, 2019). For instance, as part of China's cultural diplomacy push, one of the BRI's aims is promoting TCM abroad. This will likely increase demand for wildlife-derived medicinal products, including threatened species products. With careful and strategic management, the risks that TCM industry growth poses to unsustainably or illegally traded wildlife can represent opportunities to establish well-governed supply

CHEUNG ET AL. People and Nature

chains and integrate conservation objectives into sustainable TCM development (Brinckmann et al., 2018; Hinsley et al., 2020; Hughes et al., 2020). The success of an initiative to sustainably wild-harvest the southern *Schisandra* fruit, a TCM ingredient, in giant panda habitat is an example of such integration (Brinckmann et al., 2018). More broadly, the environmental consequences in China from three decades of rapid economic growth provides valuable lessons for other developing countries to ensure that BRI-related development is environmentally sustainable, take advantage of modern environmental governance frameworks, and improve upon environmental impact assessments and strategic planning (Foggin, 2018; Turschwell et al., 2020).

The scale of China's carbon footprint means that it must play a critical role in the global response to climate change. However, Beijing's emissions reduction commitments have thus far been inadequate (Gilley, 2012; Harris, 2011; Harris, 2017). Nevertheless, the global climate leadership vacuum-widened by unreliable US involvement in global climate governance (e.g. withdrawing and re-entering the Paris Agreement) and against the backdrop of evolving dynamics in US-China relations (De Graaff & Van Apeldoorn, 2018; Kristensen & Morgan, 2018)-presents an opportunity for the CPC. Taking a more prominent role on global environmental issues like climate change, including strengthening partnerships and collaborations with partners like the EU and BRICs nations (Liu et al., 2019; Petrone, 2019), would help the Chinese government develop its standing as a credible and responsible global leader at a time of geopolitical flux (Beeson & Watson, 2019; He & Feng, 2019; Xing, 2019).

8 | CONCLUSION

Efforts to protect the environment can be complicated by other societal considerations and interests which compete for influence in policymaking. Conservationists face various limitations, including resource availability, scientific uncertainty and political feasibility, necessitating the optimization of decision-making. Environmental solutions can piggyback on existing political will if they are aligned with the political agendas of key policymakers, improving political feasibility and making these solutions more likely to gain traction and find success. In this paper, we examined the priorities of the Chinese government to identify opportunities to leverage Beijing's political agenda for sustainability and conservation gains.

We acknowledge that there are limitations to the potential utility of leveraging existing political will to deliver ecological outcomes, some of which are universal. While alignment with the political will of policymakers at the national level is important, success in environmental governance also requires the inclusion and engagement of other parties, including the private sector, NGOs, general public and local community stakeholders, and other relevant national agency and regional government actors (Brondizio & Le Tourneau, 2016; Gunningham, 2009). In places where politicians

are elected democratically, factors like term limits can influence and complicate leaders' incentives and motivations in the context of environmental governance (DiLorenzo & Stone, 2021). There are also situations where ecologically optimal solutions simply do not align with the strategic priorities of politicians. Certain political considerations, like sovereignty and security, are always likely to trump environmental concerns. This can have consequences for environmental initiatives. For instance, we must try to avoid the fate of the 'Grain for Green' initiative, an ecological recovery program introduced in 1999 to convert marginal croplands to pasture, forest and wetlands, but which was curtailed in 2004 after being blamed for poor grain production. Despite there being little evidence to support these claims, the Chinese government wished to avoid public perceptions that nature conservation was taking priority over protecting food security (Xu et al., 2006; Ye & Van Ranst, 2009). To leverage existing political will for sustainability and conservation gains, careful management of communications and perceptions is needed to ensure that stakeholders recognize that environmental objectives can be achieved alongside 'more pressing' societal interests.

Furthermore, actual political will to improve environmental conditions may not measure up to commitments made by politicians. This is a universal concern—what is said does not always match the reality on the ground. For instance, research has shown that politicians regularly defect from pro-environmental campaign promises and produce policies that are less stringent (Ringquist et al., 2013). However, as Post et al. (2010) noted, 'while divining actual intent is often impossible, indirect signals of intent and influences on intent are observable'. Statements indicating the presence of political will should be considered in the context of other indicators of genuine commitment (e.g. making credible, binding commitments; similar past actions or policies) and the strategic priorities of the policymakers involved (e.g. accountability relationships between decision makers and their constituents; influence of organizations, businesses, military, religious groups; institutional incentives that are aligned with the commitments) (Post et al., 2010). Familiarity with these priorities is axiomatically necessary.

Some limitations are more specific to China. Its top-down governance model can lead to misalignment between central government policy and local incentives and priorities, resulting in implementation gaps (Gilley, 2012; Lo, 2015). Overlapping authority and ambiguous responsibilities between different agencies is a persistent issue which exacerbates the challenges of managing trade-offs in delivering sustainable outcomes (Xu et al., 2012; Zheng & Cao, 2015). Issues related to weak rule of law, unclear land tenure and disconnects between research and management implementation also present challenges (Grumbine & Xu, 2011). While environmental policies in China increasingly recognize the importance of coordinated community development (People's Republic of China, 2017b), citizen participation remains limited despite recent improvements (Teets, 2018; Zhang et al., 2016; Zheng & Cao, 2015). For scientists (especially those outside of China), influencing Chinese environmental policymaking is possible through established channels like the China Council for International Cooperation on Environment

and Development (CCICED) and the Chinese Academy of Sciences (CAS), although accessibility, openness and straightforwardness can vary and pose challenges. A greater understanding of the pathways through which conservationists can most effectively access the political system in China to influence and shape environmental policy would be valuable for conservationists and can be the focus of future research.

In conclusion, the mere presence of genuine political will does not resolve the complexities of developing and implementing durable and sustainable solutions at different levels. However, it is a prerequisite for effective environmental policies, interventions and governance. Identifying where political will already exists for the political agenda of key policymakers can benefit scientists and practitioners devising environmental solutions. The strategic pursuit of environmental goals can benefit from examining where political will exists among decision-makers and the political agendas of different stakeholders in local, regional and global environmental governance. Where there is political will, there is a way to leverage the political agenda of decision-makers for sustainability and conservation gains.

AUTHOR CONTRIBUTIONS

Hubert Cheung conceived the idea for this manuscript with Yutong Phoenix Feng and Yifu Wang, and subsequently led the writing of this manuscript. All authors contributed significantly to the content of the manuscript.

ACKNOWLEDGEMENTS

We thank Jianing Fang for his contributions to the conception of this paper and input on earlier drafts. We thank journal editors and reviewers for their comments on previous versions of this manuscript.

FUNDING INFORMATION

H.C. is supported by a Japan Society for the Promotion of Science Postdoctoral Fellowship for Research in Japan, and is grateful to the Lee Shau Kee Foundation for its support. D.B. is supported by an Australian Research Council Discovery Early Career Researcher Grant (DE 160101182). A.H. is supported by the Kadas Senior Research Fellowship at Worcester College, Oxford.

CONFLICT OF INTEREST

The authors declare no competing interests.

DATA AVAILABILITY STATEMENT

This manuscript did not use primary data.

ORCID

Hubert Cheung https://orcid.org/0000-0002-5918-9907

Amy Hinsley https://orcid.org/0000-0002-5590-7617

Tien Ming Lee https://orcid.org/0000-0003-2698-9358

Hugh P. Possingham https://orcid.org/0000-0001-7755-996X

Laura Thomas-Walters https://orcid.org/0000-0002-3250-2799

Duan Biggs https://orcid.org/0000-0003-3177-4677

REFERENCES

- Aikawa, Y. (2017). Environmental NGOs and environmental pollution in China. In H. Kitagawa (Ed.), *Environmental policy and governance in China* (pp. 177–194). Springer Japan.
- Aoyama, R. (2016). 'One belt, one road': China's new global strategy. Journal of Contemporary East Asia Studies, 5, 3–22.
- Ascensão, F., Fahrig, L., Clevenger, A. P., Corlett, R. T., Jaeger, J. A. G., Laurance, W. F., & Pereira, H. M. (2018). Environmental challenges for the belt and road initiative. *Nature Sustainability*, 1, 206–209.
- Barquet, K. (2015). 'Yes to peace'? Environmental peacemaking and transboundary conservation in Central America. *Geoforum*, *63*, 14–24.
- Barquet, K., Lujala, P., & Rød, J. K. (2014). Transboundary conservation and militarized interstate disputes. *Political Geography*, 42, 1–11.
- Becard, D. S. R., & Filho, P. M. (2019). Chinese cultural diplomacy: Instruments in China's strategy for international insertion in the 21st century. *Revista Brasileira de Politica*, 62, 1D.
- Beeson, M., & Watson, N. (2019). Is international leadership changing hands or disappearing? China and the USA in comparative perspective. *Asian Perspective*, 43, 387–415.
- Bell, D., Roberton, S., & Hunter, P. R. (2004). Animal origins of SARS coronavirus: Possible links with the international trade in small carnivores. *Philosophical Transactions: Biological Sciences*, 359, 1107-1114.
- Bennett, N. J., Roth, R., Klain, S. C., Chan, K., Christie, P., Clark, D. A., Cullman, G., Curran, D., Durbin, T. J., Epstein, G., Greenberg, A., Nelson, M. P., Sandlos, J., Stedman, R., Teel, T. L., Thomas, R., Veríssimo, D., & Wyborn, C. (2017). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93–108.
- Biggs, D., Caceres-Escobar, H., Kock, R., Thomson, G., & Compton, J. (2021). Extend existing food safety systems to the global wildlife trade. The Lancet Planetary Health. 5, e402-e403.
- Bottrill, M. C., Joseph, L. N., Carwardine, J., Bode, M., Cook, C., Game, E. T., Grantham, H., Kark, S., Linke, S., McDonald-Madden, E., Pressey, R. L., Walker, S., Wilson, K. A., & Possingham, H. P. (2008). Is conservation triage just smart decision making? *Trends in Ecology & Evolution*, 23, 649–654.
- Brinckmann, J. A., Luo, W., Xu, Q., He, X., Wu, J., & Cunningham, A. B. (2018). Sustainable harvest, people and pandas: Assessing a decade of managed wild harvest and trade in Schisandra sphenanthera. *Journal of Ethnopharmacology*, 224, 522–534.
- Brinkerhoff, D. W. (2010). Unpacking the concept of political will to confront corruption.
- Brondizio, E. S., & Le Tourneau, F.-M. (2016). Environmental governance for all. *Science*, 352, 1272–1273. https://doi.org/10.1126/science.aaf5122
- Brown, K. (2012). The Communist Party of China and ideology. *China: An International Journal*, 10, 52–68.
- Callaghan, M., & Hubbard, P. (2016). The Asian infrastructure investment Bank: Multilateralism on the silk road. *China Economic Journal*, 9, 116–139.
- Campbell, S., Timoshyna, A., Sant, G., Biggs, D., Braczkowski, A., Cáceres-Escobar, H., Indraswari, K., Compton, J., & Cheung, H. (2022). Options for managing and tracing wild animal trade chains to reduce zoonotic risk.
- Carbonetti, B., Pomeroy, R., & Richards, D. L. (2014). Overcoming the lack of political will in small scale fisheries. *Marine Policy*, 44, 295–301.
- Cardoso, P., Amponsah-Mensah, K., Barreiros, J. P., Bouhuys, J., Cheung, H., Davies, A., Kumschick, S., Longhorn, S. J., Martínez-Muñoz, C. A., Morcatty, T. Q., Peters, G., Ripple, W. J., Rivera-Téllez, E., Stringham, O. C., Toomes, A., Tricorache, P., & Fukushima, C. S. (2021). Scientists' warning to humanity on illegal or unsustainable wildlife trade. *Biological Conservation*, 263, 109341.

CHEUNG ET AL. People and Nature

Cash, C. (2016). Good governance and strong political will: Are they enough for transformation? *Land Use Policy*, 50, 301–311.

- Chang, J. (2019). Implications of Xi Jinping's thought on ecological civilization. *Chinese Journal of Urban and Environmental Studies*, 7, 1975005.
- Chen, J. (2007). Rapid urbanization in China: A real challenge to soil protection and food security. Catena. 69, 1–15.
- Cooke, S. J., Lapointe, N. W. R., Martins, E. G., Thiem, J. D., Raby, G. D., Taylor, M. K., Beard, T. D., Jr., & Cowx, I. G. (2013). Failure to engage the public in issues related to inland fishes and fisheries: Strategies for building public and political will to promote meaningful conservation. *Journal of Fish Biology*, *83*, 997–1018.
- Daw, T., & Gray, T. (2005). Fisheries science and sustainability in international policy: A study of failure in the European Union's common fisheries policy. *Marine Policy*, 29, 189–197.
- De Graaff, N., & Van Apeldoorn, B. (2018). US-China relations and the liberal world order: Contending elites, colliding visions? *International Affairs*, *94*, 113-131.
- DeSombre, E. R. (2000). The experience of the Montreal protocol: Particularly remarkable, and remarkably particular. *UCLA Journal of Environmental Law and Policy*, 19, 49–82.
- DiLorenzo, M., & Stone, T. (2021). Term limits and environmental treaty commitments. *International Studies Quarterly*, 66, sqab072. https://doi.org/10.1093/isq/sqab072
- Dresse, A., Fischhendler, I., Nielsen, J. Ø., & Zikos, D. (2019). Environmental peacebuilding: Towards a theoretical framework. Cooperation and Conflict, 54, 99–119.
- Economy, E. C. (2018). China's new revolution: The reign of Xi Jinping. Foreign Affairs, 97, 60–74.
- Esmail, N., Wintle, B. C., t Sas-Rolfes, M., Athanas, A., Beale, C. M., Bending, Z., Dai, R., Fabinyi, M., Gluszek, S., Haenlein, C., Harrington, L. A., Hinsley, A., Kariuki, K., Lam, J., Markus, M., Paudel, K., Shukhova, S., Sutherland, W. J., Verissimo, D., ... Milner-Gulland, E. J. (2019). Emerging illegal wildlife trade issues in 2018: A global horizon scan. *Conservation Letters*, 13, e12715.
- Fan, M., Shen, J., Yuan, L., Jiang, R., Chen, X., Davies, W. J., & Zhang, F. (2011). Improving crop productivity and resource use efficiency to ensure food security and environmental quality in China. *Journal of Experimental Botany*, 63, 13–24.
- Farhadinia, M. S., Maheshwari, A., Nawaz, M. A., Ambarlı, H., Gritsina, M. A., Koshkin, M. A., Rosen, T., Hinsley, A., & Macdonald, D. W. (2019). Belt and road initiative may create new supplies for illegal wildlife trade in large carnivores. *Nature Ecology & Evolution*, 3, 1267–1268.
- Foggin, J. M. (2018). Environmental conservation in the Tibetan plateau region: Lessons for China's belt and road initiative in the mountains of Central Asia. *Land*, 7, 52–86.
- Fu, B.-J., Zhuang, X.-L., Jiang, G.-B., Shi, J.-B., & Lu, Y.-H. (2007). Environmental problems and challenges in China. *Environmental Science & Technology*, 41, 7597–7602.
- Fukushima, C. S., Tricorache, P., Toomes, A., Stringham, O. C., Rivera-Téllez, E., Ripple, W. J., Peters, G., Orenstein, R. I., Morcatty, T. Q., Longhorn, S. J., Lee, C., Kumschick, S., de Freitas, M. A., Duffy, R. V., Davies, A., Cheung, H., Cheyne, S. M., Bouhuys, J., Barreiros, J. P., ... Cardoso, P. (2021). Challenges and perspectives on tackling illegal or unsustainable wildlife trade. *Biological Conservation*, 263, 109342.
- Gao, J. (2019). How China will protect one-quarter of its land. *Nature*, 569, 457-458.
- Geall, S., & Ely, A. (2018). Narratives and pathways towards an ecological civilization in contemporary China. *The China Quarterly*, 236, 1175–1196.
- Ghose, B. (2014). Food security and food self-sufficiency in China: From past to 2050. *Food and Energy Security*, *3*, 86–95.
- Gilabert, P., & Lawford-Smith, H. (2012). Political feasibility: A conceptual exploration. *Political Studies*, 60, 809–825.

Gilley, B. (2012). Authoritarian environmentalism and China's response to climate change. *Environmental Politics*, 21, 287–307.

- Gregory, J. M. (2018). Bismarck or Wilhelm? China's peaceful rise vs. its South China Sea policy. *Asian Perspective*, 42, 265.
- Grumbine, R. E. (2007). China's emergence and the prospects for global sustainability. *BioScience*, 57, 249–255.
- Grumbine, R. E. (2018). Using transboundary environmental security to manage the Mekong River: China and south-east Asian countries. International Journal of Water Resources Development, 34, 792–811.
- Grumbine, R. E., & Xu, J. (2011). Creating a 'conservation with Chinese characteristics'. *Biological Conservation*, 144, 1347–1355.
- Gunningham, N. (2009). The new collaborative environmental governance: The localization of regulation. *Journal of Law and Society*, 36, 145–166.
- Hammergren, L. (1998). Political will, constituency building, and public support in rule of law programs in Center for Democracy and Governance BfGP, field support, and research. U.S. Agency for International Development.
- Hansen, M. H., Li, H., & Svarverud, R. (2018). Ecological civilization: Interpreting the Chinese past, projecting the global future. *Global Environmental Change*, 53, 195–203.
- Harris, P. G. (2011). Peace, security and global climate change: The vital role of China. *Global Change, Peace & Security*, 23, 141–145.
- Harris, P. G. (2017). China's Paris pledge on climate change: Inadequate and irresponsible. *Journal of Environmental Studies and Sciences*, 7, 102–107.
- Harrison, N. L., & Sachs, J. D. (2022). A call for an independent inquiry into the origin of the SARS-CoV-2 virus. Proceedings of the National Academy of Sciences of the United States of America, 119, e2202769119.
- He, F. (2009). Price of prosperity: Economic development and biological conservation in China. *Journal of Applied Ecology*, 46, 511–515.
- He, K., & Feng, H. (2019). Leadership transition and global governance: Role conception, institutional balancing, and the AIIB. The Chinese Journal of International Politics, 12, 153–178.
- Hinsley, A., Milner-Gulland, E. J., Cooney, R., Timoshyna, A., Ruan, X., & Lee, T. M. (2020). Building sustainability into the belt and road Initiative's traditional Chinese medicine trade. *Nature Sustainability*, 3, 96–100.
- Holbig, H., & Gilley, B. (2010). Reclaiming legitimacy in China. *Politics & Policy*, 38, 395–422.
- Hua, F., Xu, J., & Wilcove, D. S. (2018). A new opportunity to recover native forests in China. Conservation Letters, 11, e12396.
- Huang, Y. (2019). Environmental risks and opportunities for countries along the belt and road: Location choice of China's investment. *Journal of Cleaner Production*, 211, 14–26.
- Hughes, A. C., Lechner, A. M., Chitov, A., Horstmann, A., Hinsley, A., Tritto, A., Chariton, A., Li, B. V., Ganapin, D., Simonov, E., Morton, K., Toktomushev, K., Foggin, M., Tan-Mullins, M., Orr, M. C., Griffiths, R., Nash, R., Perkin, S., Glémet, R., ... Yu, D. W. (2020). Horizon scan of the belt and road initiative. Trends in Ecology & Evolution, 35, 583-593.
- Ide, T. (2018). Does environmental peacemaking between states work? Insights on cooperative environmental agreements and reconciliation in international rivalries. *Journal of Peace Research*, 55, 351–365.
- Ide, T. (2020). The dark side of environmental peacebuilding. *World Development*, 127, 104777.
- IUCN. (2012). Bear farming in Asia, with particular reference to the conservation of wild populations. IUCN.
- Jain, P. (2021). Hesitant realism: China-India border tensions and Delhi's deepening strategic ties with Tokyo and Canberra. *Journal of Asian* Security and International Affairs, 8, 77–97.
- Jiang, Y., & Xue, X. (2015). Building a cross-strait cooperation mechanism for the conservation and management of fishery resources in the South China Sea. Ocean and Coastal Management, 116, 318–330.

 ${\it Jones, N. (2007). China tops CO}_2 \ emissions. \ \textit{Nature. https://www.nature.} \\ {\it com/news/2007/070618/full/news070618-9.html}$

- Kapoutsis, I., Papalexandris, A., Treadway, D. C., & Bentley, J. (2017). Measuring political will in organizations: Theoretical construct development and empirical validation. *Journal of Management*, 43, 2252–2280.
- Khan, S., Hanjra, M. A., & Mu, J. (2009). Water management and crop production for food security in China: A review. Agricultural Water Management. 96, 349–360.
- Kostka, G., & Zhang, C. (2018). Tightening the grip: Environmental governance under Xi Jinping. *Environmental Politics*, *27*, 769–781.
- Kristensen, P. M., & Morgan, P. (2018). Leadership with Chinese characteristics. *Chinese Political Science Review*, 3, 1–9.
- Lang, G. (2002). Forests, floods, and the environmental state in China. *Organization & Environment*, 15, 109–130.
- Lassa, J. A., Surjan, A., Caballero-Anthony, M., & Fisher, R. (2019). Measuring political will: An index of commitment to disaster risk reduction. International Journal of Disaster Risk Reduction, 34, 64–74.
- Laurance, W. F., Peletier-Jellema, A., Geenen, B., Koster, H., Verweij, P., Van Dijck, P., Lovejoy, T. E., Schleicher, J., & Van Kuijk, M. (2015). Reducing the global environmental impacts of rapid infrastructure expansion. Current Biology, 25, R259–R262.
- Li, B. V., & Pimm, S. L. (2016). China's endemic vertebrates sheltering under the protective umbrella of the giant panda. *Conservation Biology*, 30, 329–339.
- Li, D., Huang, M., Ren, S., Chen, X., & Ning, L. (2018). Environmental legitimacy, green innovation, and corporate carbon disclosure: Evidence from CDP China 100. *Journal of Business Ethics*, 150, 1089–1104.
- Lin, J., Fridley, D., Lu, H., Price, L., & Zhou, N. (2018). Has coal use peaked in China: Near-term trends in China's coal consumption. *Energy Policy*, 123, 208–214.
- Liu, C., & Wang, Y. (2020). 温病学理论指导下的新型冠状病毒肺炎诊治刍 议 [discussion on the application of febrile disease theory to the diagnosis and treatment of COVID-19]. 上海中医药杂志 [Shanghai Journal of Traditional Chinese Medicine], 54, 5-8.
- Liu, J. (2003). SARS, wildlife, and human health. Science, 302, 53.
- Liu, J., Yong, D. L., Choi, C.-Y., & Gibson, L. (2020). Transboundary frontiers: An emerging priority for biodiversity conservation. *Trends in Ecology & Evolution*, 35, 679–690.
- Liu, L., Wu, T., & Wan, Z. (2019). The EU-China relationship in a new era of global climate governance. *Asia Europe Journal*, 17, 243–254.
- Lo, K. (2015). How authoritarian is the environmental governance of China? *Environmental Science & Policy*, 54, 152–159.
- Mackelworth, P., Holcer, D., & Lazar, B. (2013). Using conservation as a tool to resolve conflict: Establishing the Piran–Savudrija international marine Peace Park. *Marine Policy*, *39*, 112–119.
- Mariia, K. (2019). China's Arctic policy: Present and future. *The Polar Journal*, *9*, 94–112.
- Martin, A., Rutagarama, E., Cascão, A., Gray, M., & Chhotray, V. (2011). Understanding the co-existence of conflict and cooperation: Transboundary ecosystem management in the Virunga massif. Journal of Peace Research, 48, 621–635.
- Maxmen, A. (2022). Wuhan market was epicentre of pandemic's start, studies suggest. *Nature*, 603, 15–16. https://doi.org/10.1038/d41586-022-00584-8
- McDonald-Madden, E., Baxter, P. W. J., & Possingham, H. P. (2008). Making robust decisions for conservation with restricted money and knowledge. *Journal of Applied Ecology*, 45, 1630–1638.
- McManus, J. W. (2017). Offshore coral reef damage, overfishing, and paths to peace in the South China Sea. *The International Journal of Marine and Coastal Law*, 32, 199–237.
- Miller, A. W., & Ruiz, G. M. (2014). Arctic shipping and marine invaders. *Nature Climate Change*, 4, 413–416.
- Miller-Rushing, A. J., Primack, R. B., Ma, K., & Zhou, Z.-Q. (2017). A Chinese approach to protected areas: A case study comparison with the United States. *Biological Conservation*, 210, 101–112.

Min, S., Bai, J.-f., Seale, J., & Wahl, T. (2015). Demographics, societal aging, and meat consumption in China. *Journal of Integrative Agriculture*, 14, 995–1007.

- Mukhopadhyay, K., Thomassin, P. J., & Zhang, J. (2018). Food security in China at 2050: A global CGE exercise. *Journal of Economic Structures*, 7, 1.
- Nguyen-Dang, T. (2012). Fisheries cooperation in the South China Sea and the (ir)relevance of sovereighty question. *Asian Journal of International law*. 2. 59–88.
- Nijman, V., Zhang, M. X., & Shepherd, C. R. (2016). Pangolin trade in the Mong La wildlife market and the role of Myanmar in the smuggling of pangolins into China. Global Ecology and Conservation, 5, 118–126.
- People's Republic of China. (2011). China's Peaceful Development in Information Office of the State Council.
- People's Republic of China. (2015). 全国第四次大熊猫调查结果公布 [Announcement of the Results of the Fourth National Giant Panda Survey] in State Forestry Administration.
- People's Republic of China. (2016). President Xi calls for building 'green, healthy, intelligent and peaceful' Silk Road in The State Council Information Office.
- People's Republic of China. (2017a). China embraces new 'principal contradiction' when embarking on new journey.
- People's Republic of China. (2017b). 中共中央办公厅 国务院办公厅 印发《建立国家公园体制总体方案》[<Comprehensive Plan for Establishing a National Park System> Issued by the General Office of the Communist Party of China and the General Office of the Communist Party of China].
- People's Republic of China. (2019a). 19th CPC Central Committee concludes fourth plenary session, releases communique in State Council.
- People's Republic of China. (2019b). The belt and road initiative Progress, contributions and prospects (22-04-2019) in Office of the Leading Group for promoting the belt and road initiative. Belt and Road Portal.
- People's Republic of China. (2019c). 农业农村部关于长江流域重点水域禁捕范围和时间的通告 [Notice of the Ministry of Agricultural and Rural Affairs on the spatiotemporal scope of the Yangtze River basin fishing ban] in Ministry of Agricultural and Rural Affairs of the People's Republic of China.
- People's Republic of China. (2020a). Decision of the Standing Committee of the National People's Congress on a complete ban of illegal wild-life trade and the elimination of the unhealthy habit of indiscriminate wild animal meat consumption for the protection of human life and health in National People's Congress.
- People's Republic of China. (2020b). 市场监管总局 农业农村部 国家林草局 关于禁止野生动物交易的公告 [Notice banning wildlife trade from the State Administration for Market Regulation, Ministry of Agriculture and National Forestry & Grassland Administration] in State Administration for Market Regulation MoAaNFGA.
- Petrone, F. (2019). BRICS, soft power and climate change: New challenges in global governance? *Ethics & Global Politics*, 12, 19–30.
- Pham, P. N., Gibbons, N., & Vinck, P. (2019). A framework for assessing political will in transitional justice contexts. *The International Journal of Human Rights*, 23, 993–1009.
- Plowright, R. K., Parrish, C. R., McCallum, H., Hudson, P. J., Ko, A. I., Graham, A. L., & Lloyd-Smith, J. O. (2017). Pathways to zoonotic spillover. *Nature Reviews Microbiology*, *15*, 502–510.
- Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, *360*, 987–992.
- Post, L. A., Raile, A. N. W., & Raile, E. D. (2010). Defining political will. Politics & Policy, 38, 653–676.
- Qian, Y., Song, K., Hu, T., & Ying, T. (2018). Environmental status of livestock and poultry sectors in China under current transformation stage. Science of the Total Environment, 622-623, 702-709.
- Regilme, S. S. F. (2018). Beyond paradigms: Understanding the South China Sea dispute using analytic eclecticism. *International Studies*, 55, 213–237.

CHEUNG ET AL. People and Nature | 11

Reynolds, K. M. (2017). Unpacking the complex nature of cooperative interactions: Case studies of Israeli-Palestinian environmental cooperation in the greater Bethlehem area. *GeoJournal*, 82, 701–719.

- Ringquist, E. J., Neshkova, M. I., & Aamidor, J. (2013). Campaign promises, democratic governance, and environmental policy in the U.S. Congress. *Policy Studies Journal*, 41, 365–387.
- Roulin, A., Abu Rashid, M., Spiegel, B., Charter, M., Dreiss, A. N., & Leshem, Y. (2017). 'Nature knows No boundaries': The role of nature conservation in peacebuilding. *Trends in Ecology & Evolution*, 32, 305–310.
- Rudd, K. (2018). The avoidable war: Reflections on U.S.-China relations and the end of strategic engagement.
- Sale, P. F. (2015). Coral reef conservation and political will. *Environmental Conservation*, 42, 97–101.
- Schumacher, I. (2015). The endogenous formation of an environmental culture. *European Economic Review*, 76, 200–221.
- Shambaugh, D. (2015). China's soft-power push: The search for respect. Foreign Affairs, 94, 99–107.
- Shambaugh, D. (2018). Contemplating China's future. *Journal of Chinese Political Science*, 23, 1–7.
- Sills, J., Xiao, L., & Zhao, R. (2017). China's new era of ecological civilization. *Science*, 358, 1008–1009.
- Smiley Evans, T., Shi, Z., Boots, M., Liu, W., Olival, K. J., Xiao, X., Vandewoude, S., Brown, H., Chen, J. L., Civitello, D. J., Escobar, L., Grohn, Y., Li, H., Lips, K., Liu, Q., Lu, J., Martínez-López, B., Shi, J., Shi, X., ... Getz, W. M. (2020). Synergistic China–US ecological research is essential for global emerging infectious disease preparedness. *EcoHealth*, 17, 160–173.
- Smith, S. N. (2018). Community of common destiny: China's 'new assertiveness' and the changing Asian order. *International Journal*, 73, 449–463.
- Smith, S. N. (2019). Harmonizing the periphery: China's neighborhood strategy under Xi Jinping. *The Pacific Review*, 34, 56–84.
- Smith, S. N. (2021). Harmonizing the periphery: China's neighborhood strategy under Xi Jinping. *The Pacific Review*, 34, 56–84.
- Sutherland, W. J., Butchart, S. H. M., Connor, B., Culshaw, C., Dicks, L. V., Dinsdale, J., Doran, H., Entwistle, A. C., Fleishman, E., Gibbons, D. W., Jiang, Z., Keim, B., Roux, X. L., Lickorish, F. A., Markillie, P., Monk, K. A., Mortimer, D., Pearce-Higgins, J. W., Peck, L. S., ... Gleave, R. A. (2018). A 2018 horizon scan of emerging issues for global conservation and biological diversity. *Trends in Ecology & Evolution*, 33, 47–58.
- Teets, J. (2018). The power of policy networks in authoritarian regimes: Changing environmental policy in China. *Governance*, 31, 125–141.
- Teh, L. S. L., Witter, A., Cheung, W. W. L., Sumaila, U. R., & Yin, X. (2017). What is at stake? Status and threats to South China Sea marine fisheries. *Ambio*, 46, 57–72.
- Thompson, G., & Staddon, A. (2020). Motivation of MPs and political will. In R. Stapenhurst, R. Draman, B. Larson, & A. Staddon (Eds.), Anticorruption evidence: The role of parliaments in curbing corruption (pp. 165–183). Springer International Publishing.
- Tian, X., Hu, Y., Yin, H., Geng, Y., & Bleischwitz, R. (2019). Trade impacts of China's belt and road initiative: From resource and environmental perspectives. *Resources, Conservation and Recycling*, 150, 104430.
- Tracy, E. F., Shvarts, E., Simonov, E., & Babenko, M. (2017). China's new Eurasian ambitions: The environmental risks of the silk road Economic Belt. Eurasian Geography and Economics, 58, 56–88.
- Treadway, D. C. (2011). Political will in organizations. In G. R. Ferris & D. C. Treadway (Eds.), *Politics in organizations: Theory and research considerations* (pp. 529–554). Routledge.
- Turschwell, M. P., Brown, C. J., Pearson, R. M., & Connolly, R. M. (2020). China's belt and road initiative: Conservation opportunities for threatened marine species and habitats. *Marine Policy*, 112, 103791.
- United Nations. (2012). Back to our common future—Sustainable development in the 21st century (SD21) project—Summary for policymakers.

United Nations Environment Programme. (2020). Update of the zero draft of the post-2020 global biodiversity framework in convention on biological diversity.

- Van Dover, C. L., Ardron, J. A., Escobar, E., Gianni, M., Gjerde, K. M., Jaeckel, A., Jones, D. O. B., Levin, L. A., Niner, H. J., Pendleton, L., Smith, C. R., Thiele, T., Turner, P. J., Watling, L., & Weaver, P. P. E. (2017). Biodiversity loss from deep-sea mining. *Nature Geoscience*, 10, 464-465.
- Vitkalova, A. V., Feng, L., Rybin, A. N., Gerber, B. D., Miquelle, D. G., Wang, T., Yang, H., Shevtsova, E. I., Aramilev, V. V., & Ge, J. (2018). Transboundary cooperation improves endangered species monitoring and conservation actions: A case study of the global population of Amur leopards. *Conservation Letters*, 11, e12574.
- Wang, J. (2018). Reform of China's environmental governance: The creation of a Ministry of Ecology and Environment. *Chinese Journal of Environmental Law*, 2, 112–117.
- Wang, S., van Kooten, G. C., & Wilson, B. (2004). Mosaic of reform: Forest policy in post-1978 China. Forest Policy and Economics, 6, 71–83.
- Wang, T., Andrew Royle, J., Smith, J. L. D., Zou, L., Lü, X., Li, T., Yang, H., Li, Z., Feng, R., Bian, Y., Feng, L., & Ge, J. (2018). Living on the edge: Opportunities for Amur tiger recovery in China. *Biological Conservation*, 217, 269–279.
- Wang, T., Feng, L., Yang, H., Han, B., Zhao, Y., Juan, L., Lü, X., Zou, L., Li, T., Xiao, W., Mou, P., Smith, J. L. D., & Ge, J. (2017). A sciencebased approach to guide Amur leopard recovery in China. *Biological Conservation*, 210, 47–55.
- Wang, T., Nie, W., Gao, J., Xue, L. K., Gao, X. M., Wang, X. F., Qiu, J., Poon, C. N., Meinardi, S., Blake, D., Wang, S. L., Ding, A. J., Chai, F. H., Zhang, Q. Z., & Wang, W. X. (2010). Air quality during the 2008 Beijing Olympics: Secondary pollutants and regional impact. Atmospheric Chemistry and Physics, 10, 7603–7615.
- Wang, Y., Hao, J., McElroy, M. B., Munger, J. W., Ma, H., Chen, D., & Nielsen, C. P. (2009). Ozone air quality during the 2008 Beijing Olympics: Effectiveness of emission restrictions. Atmospheric Chemistry and Physics, 9, 5237–5251.
- Watson, J. E. M., Shanahan Danielle, F., Di Marco, M., Allan, J., Laurance William, F., Sanderson Eric, W., Mackey, B., & Venter, O. (2016). Catastrophic declines in wilderness areas undermine global environment targets. *Current Biology*, 26, 2929–2934.
- Wei, F., Cui, S., Liu, N., Chang, J., Ping, X., Ma, T., Xu, J., Swaisgood, R. R., & Locke, H. (2020). Ecological civilization: China's effort to build a shared future for all life on earth. *National Science Review*, 8, nwaa279. https://doi.org/10.1093/nsr/nwaa279
- Wei, F., Swaisgood, R., Hu, Y., Nie, Y., Yan, L., Zhang, Z., Qi, D., & Zhu, L. (2015). Progress in the ecology and conservation of giant pandas. *Conservation Biology*, *29*, 1497–1507.
- Wong, R. W. Y. (2016). The role of reputation in the illegal purchase of protected wildlife in China. *Deviant Behavior*, 38, 1-13.
- Wong, R. W. Y. (2019). The illegal wildlife trade in China: Understanding the distribution networks. Springer International Publishing.
- Wu, R., Possingham, H. P., Yu, G., Jin, T., Wang, J., Yang, F., Liu, S., Ma, J., Liu, X., & Zhao, H. (2019). Strengthening China's national biodiversity strategy to attain an ecological civilization. *Conservation Letters*, 12, e12660.
- Xi, J. (2016). Keynote speech by H.E. Xi Jinping, president of the People's Republic of China, at the opening ceremony of the G20 summit (September 3, 2016) in China MoFAotPsRo, Hangzhou, China.
- Xi, J. (2017). Secure a decisive victory in building a moderately prosperous Society in all Respects and Strive for the great success of socialism with Chinese characteristics for a NewEra. Beijing, China.
- Xi, J. (2019). 习近平:在黄河流域生态保护和高质量发展座谈会上的讲话 [transcript of a speech delivered by Xi Jinping on 2019-09-18 at the forum on biodiversity conservation and high-quality development in the Yellow River basin]. Xinhua News Agency.

Xing, J., Zhang, Y., Wang, S., Liu, X., Cheng, S., Zhang, Q., Chen, Y., Streets, D. G., Jang, C., Hao, J., & Wang, W. (2011). Modeling study on the air quality impacts from emission reductions and atypical meteorological conditions during the 2008 Beijing Olympics. *Atmospheric Environment*, 45, 1786–1798.

- Xing, L. (2019). China's pursuit of the 'one belt one road' initiative: A New World order with Chinese characteristics? In L. Xing (Ed.), *Mapping China's 'one belt one road' initiative* (pp. 1–27). Springer International Publishing.
- Xinhua. (2019). China teams up with Russia in tiger, leopard protection.
- Xu, J., Zhang, Z., Liu, W., & McGowan, P. J. K. (2012). A review and assessment of nature reserve policy in China: Advances, challenges and opportunities. *Oryx*, 46, 554–562.
- Xu, W., Pimm, S. L., Du, A., Su, Y., Fan, X., An, L., Liu, J., & Ouyang, Z. (2019). Transforming protected area management in China. *Trends in Ecology & Evolution*, 34, 762–766.
- Xu, X., Tan, Y., Yang, G., & Barnett, J. (2018). China's ambitious ecological red lines. *Land Use Policy*, 79, 447–451.
- Xu, Z., Xu, J., Deng, X., Huang, J., Uchida, E., & Rozelle, S. (2006). Grain for green versus grain: Conflict between food security and conservation set-aside in China. World Development, 34, 130–148.
- Yang, D., Dai, X., Deng, Y., Lu, W., & Jiang, Z. (2007). Changes in attitudes toward wildlife and wildlife meats in Hunan Province, Central China, before and after the severe acute respiratory syndrome outbreak. *Integrative Zoology*, 2, 19–25.
- Ye, L., & Van Ranst, E. (2009). Production scenarios and the effect of soil degradation on long-term food security in China. Global Environmental Change, 19, 464–481.
- Ye, S., Li, Z., Zhang, T., Liu, J., & Xie, S. (2014). Assessing fish distribution and threats to fish biodiversity in the Yangtze River basin, China. *Ichthyological Research*, 61, 183–188.
- Ye, Y.-C., Yu, W.-H., Newman, C., Buesching, C. D., Xu, Y.-I., Xiao, X., Macdonald, D. W., & Zhou, Z.-M. (2020). Effects of regional economics on the online sale of protected parrots and turtles in China. Conservation Science and Practice, 2, e161. https://doi.org/10.1111/ csp2.161
- Yi, Y., Yang, Z., & Zhang, S. (2011). Ecological risk assessment of heavy metals in sediment and human health risk assessment of heavy metals in fishes in the middle and lower reaches of the Yangtze River basin. Environmental Pollution, 159, 2575–2585.

- Yu, H. (2017). Motivation behind China's 'one belt, one road' initiatives and establishment of the Asian infrastructure investment Bank. *Journal of Contemporary China*, 26, 353–368.
- Yu, Y., Feng, K., Hubacek, K., & Sun, L. (2016). Global implications of China's future food consumption. *Journal of Industrial Ecology*, 20, 593–602.
- Zeng, J. (2014). The debate on regime legitimacy in China: Bridging the wide gulf between Western and Chinese scholarship. *Journal of Contemporary China*, 23, 612–635.
- Zhang, F. (2019). The Xi Jinping doctrine of China's international relations. *Asia Policy*, 14, 7–23.
- Zhang, H. (2016). Chinese fishermen in disputed waters: Not quite a 'people's war'. *Marine Policy*, 68, 65–73.
- Zhang, H. (2018). Fisheries cooperation in the South China Sea: Evaluating the options. *Marine Policy*, 89, 67–76.
- Zhang, H., Kang, M., Shen, L., Wu, J., Li, J., du, H., Wang, C., Yang, H., Zhou, Q., Liu, Z., Gorfine, H., & Wei, Q. (2020). Rapid change in Yangtze fisheries and its implications for global freshwater ecosystem management. *Fish and Fisheries*, 21, 601–620.
- Zhang, L., Mol, A. P. J., & He, G. (2016). Transparency and information disclosure in China's environmental governance. *Current Opinion in Environmental Sustainability*, 18, 17–24.
- Zhao, S. (2016). The ideological campaign in Xi's China. *Rebuilding Regime Legitimacy*, 56, 1168–1193.
- Zheng, H., & Cao, S. (2015). Threats to China's biodiversity by contradictions policy. *Ambio*, 44, 23–33.
- Zheng, Y., & Lye, L. F. (2015). China's foreign policy: The unveiling of president Xi Jinping's grand strategy. *East Asian Policy*, 07, 62–82.
- Zheng, Y., Xue, T., Zhang, Q., Geng, G., Tong, D., Li, X., & He, K. (2017). Air quality improvements and health benefits from China's clean air action since 2013. *Environmental Research Letters*, 12, 114020.

How to cite this article: Cheung, H., Feng, Y. P., Hinsley, A., Lee, T. M., Possingham, H. P., Smith, S. N., Thomas-Walters, L., Wang, Y., & Biggs, D. (2022). Understanding China's political will for sustainability and conservation gains. *People and Nature*, 00, 1–12. https://doi.org/10.1002/pan3.10425