Engaging with China's ecological civilisation

A pathway to a green economy?

Written by: Lila Buckley

Reviewed by: Chris Hopkins

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About this paper

This paper describes the evolving discourse around the Chinese concept of "ecological civilisation" - a uniquely Chinese approach to green economic policy, combining ambitious environmental targets, centralised state power, and traditional Chinese philosophy. The paper details the recent history of ecological civilisation and identifies how the concept has contributed towards China's increasing environmental ambition, both domestically and internationally. This paper argues that a more nuanced and contextual understanding of ecological civilisation will aid international engagement with China around environmental issues. We welcome feedback and further insight into China's journey towards a greener economic system. Please contact lila.buckley@iied.org

The Green Economy Coalition hopes this paper will help promote greater understanding amongst international actors of China's environmental and economic vision.

The paper is designed for:

- International civil society, governments and businesses engaging with China on climate, biodiversity, and environmental issues;
- Researchers and academics focused on China's recent history of environmental law, governance, and international ambition;
- Funders supporting green economy approaches both within China and in countries with large Chinese investments.

Green Economy Coalition

The **Green Economy Coalition** (GEC) is the largest global civil society movement focused on green and fair economic reform, with a mission to transform our economies within a generation. The GEC mobilises global institutions, business, civil society, trade unions and people's movements behind shared positions and collective action.

Alongside China, the GEC is tracking the green economy policies other countries around the world on our **Green Economy Tracker** – a unique web platform that empowers citizens to hold their governments to account on climate, environment, and social equality commitments.

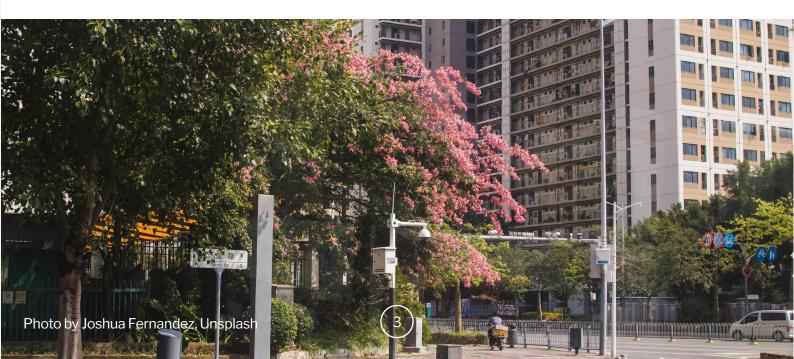


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Executive summary

China is the world's largest emitter of greenhouse gases, but is also home to the planet's largest (and still growing) carbon market. It has nearly half the world's coal power stations, but also more installed renewable energy than any other country. It leads the world in both the destruction of biodiversity, and forest restoration.

These contrasts are the result of China's remarkable economic rise. Inside a single generation, China has grown to become the world's second-largest economy – poised to overtake the US inside the next few decades – with a burgeoning middle class, a colossal manufacturing base and an increasingly active foreign policy.

Yet rapid industrialisation has exacted a heavy environmental cost. Recognising growing public anger over environmental issues as a genuine threat to its long-term survival, the Chinese Communist Party has made "ecological civilisation" a national strategic priority, guiding the machinery of state towards greener ends.

"Ecological civilisation" is a broad and complex concept, but one that is crucial to understanding modern China's social, economic and environmental policies and ambitions. Ecological civilisation is many things: a top-level strategic socio-economic goal of the Chinese government, a vision of sustainable development with specifically

Chinese characteristics, a reappraisal of political governance and party institutions, and an appeal to traditional Chinese philosophical values through environmental action.

It is also, according to some external observers, China's answer to the green economy concept. The reality is more complex, and understanding the history, political purposes, and recent trajectory of the eco civ vision is essential to understand its impact on China's environmental policy and practice, both domestically and internationally.

Although existing on the fringes of Chinese policy discussion since the 1980s, in 2016 ecological civilisation was elevated to become a central plank of China's 13th Five Year Plan. Framed in terms of "ecological rejuvenation", it also established new priorities for the modernisation of the Chinese economy and sweeping reforms to the underlying structures of Chinese economic governance.

For President Xi and the Communist Party of China, ecological civilisation brings the centralisation of authority, good governance and the rule of law into rhetorical alignment with the popular vision of protecting nature, as well as promoting familiar green economy priorities of innovation, green technology and digitalisation.

"Ecological civilisation" is a broad and complex concept, but one that is crucial to understanding modern China's social, economic and environmental policies and ambitions." Under the 13th Five Year Plan (2016-2020) the ecological civilisation vision has accelerated an integrated, structural and governance-led approach to green economy policymaking in China. Under its aegis, considerable success has been achieved in meeting ambitious environmental targets and setting the stage for further ambition under the 14th Five Year Plan – including a commitment to carbon neutrality by 2060.

Ecological civilisation is also an approach to governance, and one with the explicit aim of strengthening the authority of individual leaders and significantly expanding the power of the Chinese Communist Party. Whereas Chinese leadership in the 1990s and 2000s emphasised opening governance up to civil society, in Xi's "top down design", ecological civilisation calls for tighter management and stronger authority – not democracy.

Finally, ecological civilisation is a rhetorical strategy, deployed by the Chinese government to legitimise international environmental objectives by appealing to deep-rooted traditional cultural values, without appearing to bow to foreign pressure. In this regard it has been broadly successfully in helping to neutralise popular suspicion of environmental protection as disguised Western imperialism, and cementing ecological commitments at the heart of the "Chinese Dream". Ecological civilisation ultimately amounts to something larger than a policy agenda: a high-level vision in partial alignment and competition with green economy, but with a much wider socialtechnical scope and distinct Chinese characteristics suited to a domestic audience.

"Whereas Chinese leadership in the 1990s and 2000s emphasised opening governance up to civil society, in Xi's 'top down design', ecological civilisation calls for tighter management and stronger authority – not democracy."

2020 saw some de-emphasising of the ecological civilisation concept in the run up to important CBD and UNFCCC negotiations and diplomatic engagement with the EU. The COVID pandemic, increasingly frosty US-China relations, and the forthcoming 14th Five Year Plan have further complicated the role of ecological civilisation in China's environmental leadership.

However, it remains clear that understanding ecological civilisation is essential to engaging an increasingly influential China with the international green economy agenda. In that light, ecological civilisation must be viewed as a political vision for China's environmental agenda that serves specific domestic purposes rather than a project or policy agenda that can be compared with green economy plans, or green deals. Whether there will be an international role for ecological civilisation is still unclear, but any hope of engaging with Chinese visions of green economy – at home or internationally – requires understanding its priorities of stability, legitimacy and security.

Prelude

"Meaningful engagement with Chinese policy is not only possible, it is also welcomed – but the starting point has to be understanding those policy processes and practices themselves."

In the summer of 2005, with degrees in Chinese language and human ecology fresh in my pocket, I moved to Beijing ready to save the planet. My choice of location for such a mission befuddled many people outside of China. Beijing had the reputation as one of the most polluted cities in the world – undrinkable water; unbreathable air; sandstorms that turned skies black and covered the city in dirt; plastic food; the list of horrors, many suggested, was insurmountable.

There was growing awareness globally of the serious environmental costs of China's decades of breakneck speed economic growth – severe and widespread water and air pollution, rapid ecosystem and biodiversity loss, food safety and other consumer scandals – what leading environmentalist Ma Jun criticised as his country's race to the bottom.

To make matters worse, it seemed Chinese leaders were promoting this pollute-first-clean-up-later approach at the global level, for example, in resisting mitigation responsibility in climate negotiations.

As I set out for Beijing, I largely accepted this picture of myopic Chinese economic development marching towards environmental doom. And I was resigned to the reality that my plan to save the planet would mostly be futile.

But as I plunged myself into the vibrant, burgeoning world of Chinese civil society, I discovered a very different kind of logic of problematising and solving the country's environmental crisis.

Was China facing tremendous environmental challenges with fewer resources per capita than nearly any other country on Earth? Clearly, yes.

But were Chinese leaders collaborating with civil society, researchers and companies to find creative ways to address these issues and innovate new systems for ecologically sound, carbon neutral, and socially just economies? Also, yes.

As assistant director of a newly-formed Chinese environmental NGO, the Global Environmental Institute (GEI), I had a three-year crash course in how to engage with and support these efforts from the ground up. I watched as my colleagues and others in the sector skilfully navigated the fast-changing landscape to contribute meaningfully to policy change. I engaged in debate and celebration as we contributed to the first laws passed for, among others, public participation, environmental impact assessments, and supporting famer cooperatives.

Through this work with Chinese civil society, government and researchers, I learned that meaningful engagement with Chinese policy is not only possible, it is also welcomed – but that the starting point has to be understanding those policy processes and practices themselves.

- Lila Buckley

Introduction

Key insights

- Observers internal and external recognise divergent trends in China's ecological trajectory, being a world leader at both environmental destruction and restoration.
- "Ecological civilisation" is the government's new economic strategy, focusing on "inclusive development and ecological upgrading for China's Dream of national rejuvenation".
- Awareness of these trends is not enough to effectively engage with the ecological civilisation agenda; it is essential to also understand how Chinese leaders, scholars, and activists themselves view China's future and path to an inclusive and green society.

China at the crossroads

The global community often perceives China as a land of contradictions – both rife with ecological destruction and full of promise and potential for global ecological salvation.

The Green Economy Coalition (GEC: see Box 1), for example, recently observed that China "is the world's largest emitter of greenhouse gases, but is also home to the planet's largest (and still growing) carbon market. It has nearly half the world's coal power stations, but also more installed renewable energy than any other country. It leads the world in both environmental destruction, and forest restoration."

Today, China is making tremendous strides in environmental protection. The last two years in particular have seen a set of sweeping reforms in institutions and laws placing environmental security at the heart of domestic policymaking – and increasingly of practice.

In addition, as China increasingly asserts itself internationally through growing aid, trade and investments overseas (as in, for example, the Belt & Road Initiative), the country is also starting to grapple with its role in environment and development challenges beyond its borders.

Many have celebrated China's recent environmental reforms and its promotion of the concept of an "ecological civilisation" – a new economic strategy focusing on inclusive development and ecological upgrading for China's Dream of national rejuvenation.

Observers have marvelled at these reforms as an example of China's unique ability to "change course quickly and resolutely", asserting, for example, that "China is, today, the unquestioned world leader in green finance, and it is using its example to inspire and impress other countries worldwide" or noting that China's natural capital investment approach is "unparalleled anywhere in the world".

"Climate change, biodiversity collapse, inequality and poverty are all symptoms of a deeper, structural problem: a global economic system with incentives, institutions, and practices which are fundamentally unfit for purpose."

Others focus more on China's leadership in destructive trends, for example, of continued coal power investments both at home and abroad. All countries have divergent forces shaping political action on green transition, and China is no different. Its vast size means that it is easy to find statistics showing it as the "leader" in a variety of trends.

Whether looking at the positive or the negative trends, there seems to be growing global consensus – shared with many Chinese leaders themselves – that, as GEC have written, "The success or failure of China's planned transformation from coal-powered catastrophe to eco-civilisation will have profound global consequence."

Risks & opportunities

These contrasting realities in China help us understand both the tangible momentum in China's ecological transition as well as the ongoing challenges. But analysing these risks and opportunities alone does not fully empower us to engage with them. For that, we need to understand how Chinese leaders, scholars and activists themselves view China's future and path to an inclusive and green society. This is the entry point for this paper.

The research is based on primary policy documents as well as academic and grey literature. Due to research limitations, the perspective is focused on the policy discourse itself and does not cover the wider range of views within Chinese society. This could be a useful entry point for further research.

Here, we examine China's concept of green economy – namely, through the government's vision of Ecological Civilisation mentioned above. This discussion aims to provide context for the data presented in GEC's Green Economy Tracker, which benchmarks how nations are transitioning to green and fair economies.

In doing so, the aim is to explore what is required for China to become a global force for green economic transition – and to support reflections on how others can engage.

Box 1 The Green Economy Coalition

The **Green Economy Coalition** (GEC) is the largest global civil society movement focused on green and fair economic reform, with a mission to transform our economies within a generation.

Working globally, but hosted in London by the International Institute for Environment and Development (IIED), the GEC mobilises global institutions, business, civil society, trade unions and people's movements towards collective action.

The GEC network now spans six continents across 50 members and continues to grow, tackling some of the world's biggest challenges: extreme poverty, climate change, biodiversity loss, rising inequality and weak governance.

The GEC recognises that these issues cannot be tackled alone, and that they arise from the same problem – how our economies are organised, ruled and managed.

To help clarify this complexity and pool civil society knowledge, the GEC created the **Green Economy Tracker** – a webtool exploring the key policies for green economies, and benchmarking progress of countries as they been to transition towards green and fairer models of managing their economies.

The Tracker is constantly being updated and revised by crowdsourcing analysis from the GEC network. See the evolving China analysis and compare with other countries **here**.

Overview of this paper

Section one provides a brief overview of the historical trends in China's green economy thinking, setting the context for what follows.

Section two contains a more focused discussion of how Ecological Civilisation is currently defined, codified, and promoted in policy, institutions, and discourses. The aim of this section is to understand the key drivers and trends behind the green economy transition in China, from 2013 onward.

Section three then reviews progress up to the end of 2020 on the broad policy targets for the construction of an ecological civilisation in the context of wider Chinese policy goals and explores how they are affected by the current context of the COVID-19 pandemic.

Finally, the **conclusion** examines Chinese policy on ecological civilisation within the context of international discourse on building a global green economy. It asks how genuine Chinese commitments to green reform are, and explores how the global community can engage effectively.

Box 2 Key terminology and definitions

Belt and Road Initiative (BRI) is both China's vision for globalisation and global development, and its mechanism for other countries to join forces to implement it. This is presented along five pillars: infrastructure connectivity, unimpeded trade, financial integration, policy coordination, and people-to-people exchange. Announced by the Chinese leadership in 2013 as an ambitious global project for infrastructure, trade and investments, BRI is designed to reconfigure many aspects of China's business sector. As a vision of cooperation, BRI tries to be distinct from China's previous strategies (Reform, Opening Up and Going Out), which were not jointly implemented with other countries.

Ecological civilisation 生态文明 is a green growth vision put forward by Chinese leaders promoting a new economic strategy focusing on inclusive development and ecological upgrading. This is the key concept used to green Chinese institutions.

Five-Year Plans (FYP) are China's guiding socioeconomic development plans, issued every five years. The 13^{th} FYP covering the period from 2016-2020 has been referred to as "one of the most important documents on the planet" for global sustainability. The 14^{th} FYP will be released in early 2021.

The Chinese Dream 中国梦 or the "Chinese Dream of national rejuvenation" is Xi Jinping's vision for achieving socialist modernisation in China. It is based on "socialism with Chinese characteristics for a new era" and underpinned by an explicit strengthening of the Communist Party leading in all areas of life in China. The Dream includes three strategic goals: moderate prosperity by 2020, basic modernisation by 2035, and full modernisation by 2050. The goals include domestic targets as well as aspirations for global influence.

Two Centenary Goals 两个一百年 are goals set by the Chinese Communist Party marking progress along two important 100-year anniversaries of modern Chinese history. The goals are: 1) achieving a moderately prosperous society by 2021, the centenary of the founding of the Communist Party of China; and 2) achieving a fully modern socialist country by 2049, the centenary of the founding of the People's Republic of China. These goals are distinct from but overlap with the Chinese Dream both in content and timing.

1. Stages of China's green economy thinking

Key insights

- Though "green economy" has not been a central term in China's past or present policy discourse, the integration of economic and environmental policy is well-established.
- Ecological Civilisation (Eco Civ) has evolved from being a general problem statement of what was is absent from Chinese development in 90s/00s, towards a positive, codified, singular and "confident narrative of ecological rejuvenation" under Xi Jinping since 2013.

1.1 A green economy with Chinese characteristics

At the international level, the term "green economy" (see Box 3, below) emerged from research and practice in the field of environmental economics, promoting the idea that the economy can and should support environmental protection both at the local and global level – and that it can be used to effectively mediate trade-offs between environment and development priorities.

For its part, China does not focus on the term "green economy" in its policy discourse. However, environmental problems and their solutions have been closely integrated with Chinese economic problem-solving for much of the past five decades.

The history of China's environmental policymaking largely mirrors the global evolution of green policymaking – from a focus on legal and regulatory issues of ecological protection to mainstreaming green approaches in economic and social policy.

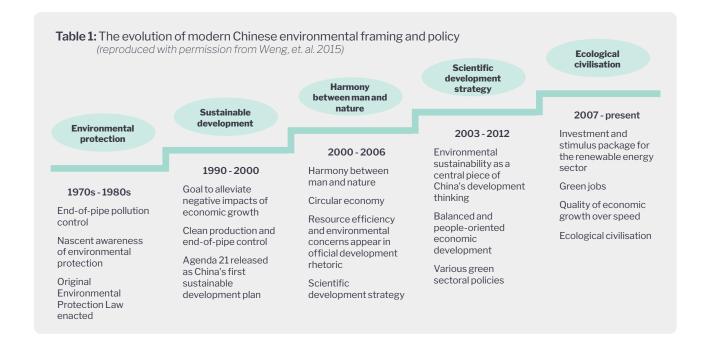
Systemic environmental problems began to receive national-level attention in China as early as the 1970s, when the first environmental policies and institutions were formed. At the central leadership level, the approach to green economy thinking has evolved over this period: from basic end-point pollution control in the 1970s and 80s, to embracing international narratives of sustainable development in the 1990s, to creating "harmony" between humans and nature in the early 2000s, to a focus on "scientific" development of individual sectors in the mid-2000s, to today's dominant narrative of constructing an "ecological civilisation". Weng et. al. 2015 (see Table 1 below) explore these historical framings in Chinese policy action and discourse in more detail.

Box 3 What is "green economy"?

While there is no internationally agreed definition of green economy, the GEC defines it as "a resilient economy that provides a better quality of life for all within the ecological limits of the planet."

The GEC argues that the transition to an inclusive green global economy will look different in different

national contexts. No matter the context, however, the GEC have identified five key themes for building a green economy – valuing nature, tackling inequality, greening economic sectors, reforming financial systems, and realigning how the economy is measured and governed.



This paper builds on this historical perspective to focus on the present framing – "ecological civilisation". As mentioned above, ecological civilisation is a vision for green growth put forward by Chinese leaders promoting a new economic strategy.

Ecological civilisation itself has evolved over time, from embodying a widely shared sense of crisis in China's development model in the 1990s and early 2000s, to becoming a "confident narrative of ecological rejuvenation" in recent years under President Xi Jinping. Our focus here is on Ecological civilisation as it is defined, codified, and promoted in policy, institutions, and discourses since 2013. Key milestones in ecological civilisation construction are outlined in Table 2 below.

Table 2	Key milestones in the construction of ecological civilisation
2013	Task Force for the Promotion of Economic Development and Ecological Civilisation (the first CCP organ dedicated to ecology)
2015	Opinions of the Central Committee of the Communist Party of China and the State Council on Further Promoting the Development of Ecological Civilisation
	Ecological Civilisation Construction Action Plan
	National campaign of Central Environmental Inspections ²
2018	"Ecological civilisation" ratified in the PRC Constitution
	Ministry of Ecology and Environment (生态环境部) created
2020	End of 13 th 5-Year Plan including many indicators for inclusive green development

"The development of ecological civilization is a basic requirement for accelerating the transformation of the economic growth model and improving the quality and benefits of development. We must ... usher in a new era of socialist ecological civilization." ¹

¹ CPC Central Committee, Opinions of the CPC Central Committee and the State Council on Further Promoting the Development of Ecological Civilization, April 2015

² These inspections reportedly punished more than 29,000 companies, imposed 1.43 billion RMB of fines (US\$216 million (6)), detained 1,527 individuals, and disciplined 18,199 officials across the country by 2018.

2. Ecological civilisation in current political reform

Key Insights

- Ecological civilisation's innovation is not in green policy proposals, but to bring together a singular, structural vision for ecological development – as expressed formally in the 13th Five Year Plan.
- Ecological civilisation has been positioned by Xi Jinping as a central part of the core vision for China's modernisation. This combines a familiar emphasis on stronger technocratic green and digital policymaking with domestic emphasis on sociocultural narratives, governance, and rule of law.
- Understanding and engaging with China's environmental vision requires recognising the importance of the multiple domestic aims of ecological civilisation, in addition to promoting ecological sustainability.

Shortly after Xi Jinping assumed the Presidency of the People's Republic of China, he pledged in 2013 that China would "not sacrifice the environment for temporary economic growth," and he called for "all-round efforts to conserve resources and curb pollution." In this pledge, he focused on the integral relationship between economic productivity and ecological preservation and said that the country was committed to shifting its development pattern.

Xi outlined some core elements of these all-round efforts, including: setting up a functional zoning strategy and establishing ecological "red lines" which would restrict industrial development in some areas; working towards efficiency gains in resource use and cutting consumption; and curbing pollution. These concepts alone were not new to environmental efforts in China.

What was new, however, was Xi's emphasis on the governance aspects required to achieve such reform. In his 2013 pledge, Xi criticised corruption and stressed that only "the strictest system and most tightknit law enforcement" could provide a reliable guarantee for China's ecological progress, and outlined an evaluation system for leaders and economic actors which would incorporate ecological protection targets for the first time.

"The interpretation of environmental progress as inextricably linked to good governance – and good governance firmly in the hands of the Communist Party of China – is a key tenet to China's modernisation project under Xi."

"As Xi settled into his presidency, northern China experienced a record-breaking air pollution event – what was later termed the 'airpocalypse' of 2014. The 'War on Pollution' which was declared following this event received strong public support and set the stage for Xi's sweeping reforms that followed."

Such interpretation of environmental progress as inextricably linked to good governance – and good governance firmly in the hands of the Communist Party of China – is a key tenet to China's modernisation project under Xi. "China must be determined," he said, "to curb environmental pollution, build a sound ecosystem, and strive to usher in a new era of socialist ecological progress".

Xi immediately began backing this pledge with institutional reforms, setting up the Task Force for the Promotion of Economic Development and Ecological Civilisation – the first Central Communist Party (CCP) organ dedicated to environmental protection. As Xi settled into his presidency, northern China experienced a record-breaking air pollution event – what was later termed the "airpocalypse" of 2014. The "War on Pollution" which was declared following this event received strong public support and set the stage for Xi's sweeping reforms that followed.

It was at this time that Chinese leadership began promoting a term that had existed since the 1980's but only on the fringes of political discussion – this was the concept of ecological civilisation.

In early 2015, an obscurely titled and densely worded "Central Document Number 12" was released: "Opinions of the Central Committee of the Communist Party of China and the State Council on Further Promoting the Development of Ecological Civilisation".

What was new in this vision was not the details of the environmental commitments themselves. Indeed, the targets set in the paper were familiar: preserving wetlands; restoring grasslands; increasing forest cover; reducing water consumption; setting "red lines" for conservation; curbing urban sprawl; diversifying energy; cutting carbon intensity; and reducing heavy industry in favour of "technological innovation". Key targets set in the Ecological Civilisation Opinion paper are outlined in Table 3 below.

Table 3

Main ecological civilisation targets for 2020 (as set in the Ecological Civilisation Opinion Paper)

- 1. Optimise the spatial development pattern for land and resources
- balance economic layout and population distribution
- · control the development intensity of land and sea and the scale of urban space
- optimise urban-rural structure and spatial layout
- 2. Increase resource utilization efficiency
- decrease carbon intensity by 40%-45% from that of 2005
- decrease energy consumption; increase resource-based output ratio "by a big margin"
- control total water consumption to under 670 billion m³
- decrease water consumption for RMB 10,000 worth of industrial added value to less than 65 m³
- effectively utilize farmland irrigation water
- increase the proportion of non-fossil energy in primary energy consumption to around 15%
- 3. Improve the overall quality of the ecological environment:
- decrease total emissions of major pollutants
- improve the quality of the atmospheric environment and the water environment at key river basins and offshore areas
- increase the rate of water quality of functional areas in key rivers and lakes to above 80%.
- · increase the safety level of drinking water
- keep soil quality stable
- control environmental risks
- reach over 23% forest coverage reaches, 56% vegetation coverage of grasslands, and at least 800 million mu of wetland
- · harness at least 50% of sanded land that can be harnessed
- maintain ratio of at least 35% preserved natural shorelines
- · contain basic biodiversity loss
- enhance the stability of the national ecological system
- 4. Establish the basic system of ecological civilization
- establish a system of ecological civilization in source-based prevention, process control, compensation for damages. and accountability investigation
- make progress in key systems regarding: regulation of ownership and use of natural resource assets; the bottom line of ecological protection; compensation for ecological protection; and management of protecting the ecological environment.

"Previous efforts [towards an ecological civilisation] had been thwarted... by a fatal combination of fragmentation, secrecy, collusion and repression."

2.1 Familiar targets, but a fresh approach

Similar targets to these had been set – and missed – many times over by previous Chinese leaders. What was new in the ecological civilisation opinion paper was the integration of these concerns into a single vision (the "construction of ecological civilisation") backed by high-level commitment to reforming the structural system underpinning the shift in the growth model. This, explained the ecological civilisation opinions paper, was a commitment to constructing a "comprehensive system of ecological civilization". The very structure of the economy was to be reformed.

As then head of the National Development and Reform Commission Xu Shaoshi explained after the Ecological Civilisation Opinion paper was released:

"Gone are the days when economic development came at the price of the natural environment, as well as the idea that economy and ecology are against each other. We need to boost economic prosperity while protecting the ecological environment.... That requires us to develop green industries that raise people's living standards without damaging the environment, which in turn requires upgrading of the national economic structure."

As ecological civilisation problematises China's past economic growth model for its ecological costs, the "civilisation" aspect of ecological civilisation also points to its governance problems. While many of Xi's predecessors had promoted notions of green economy, none before him had placed governance reforms at the heart of these efforts. Previous efforts had been "thwarted in the past," wrote China scholar Sam Geall when the Ecological Civilisation Opinion paper was published, "by a fatal combination of fragmentation, secrecy, collusion and repression." Thus, Xi was determined to crack down on corruption and re-organise the institutions of the State in service of this comprehensive reform.

This included, explained the Ecological Civilisation Opinion paper, the requirement to align "targets, assessment, rewards and punishments" of officials "to the requirements for ecological civilization". In practice, this meant punishing officials for failure to enforce environmental regulations – thus finally addressing chronic collusion between polluters and local officials that had plagued China's past environmental protection efforts.

2.2 Strengthening CCP control through Ecological Civilisation

If ecological civilisation is a mechanism for governance reform in China, it is also at the heart of a wider push for a strong rule of law, where macro control by the central government is being strengthened as a response to "imbalance in socio-economic development". As Xi said in 2014, "law ensures the Party's policies are implemented, ensures that the Party is in overall control, and coordinates core roles in all aspects of leadership". Strengthening rule of law in turn requires leadership to drive change forward.

Ecological civilisation construction efforts run through Xi's "four comprehensives" (the comprehensive completion of a moderately prosperous society, comprehensively deepen reform, comprehensively promote the rule of law, and comprehensively and strictly manage the Party) which aim to strengthen the authority of individual leaders and expanding Party power significantly.

"If ecological civilisation is a mechanism for governance reform in China, it is also at the heart of a wider push for a strong rule of law, where macro control by the central government is being strengthened as a response to an imbalance in socio-economic development".

Whereas Chinese leadership in the 1990s and 2000s emphasised opening governance to civil society, in Xi's "top down design", ecological civilisation supports a call for better management and stronger authority – not democracy.

Building on the Ecological Civilisation Opinion
Paper was the Ecological Civilisation Construction
Action Plan¹, issued a few months later, which

outlined the detailed work of the construction of China's ecological civilisation. This document acted to recentralise power and align the environmental responsibility of local party and state officials.

The Plan outlined 8 systems and 45 sub-systems covering wide-reaching reforms: property rights for natural resource assets; the development and protection of territorial space; spatial planning; regulating total consumption and comprehensive conservation of resources; payment-based resource consumption and compensating conservation and protection efforts; environmental governance; markets for environmental governance and ecological preservation; and evaluating officials' ecological conservation performance and holding those responsible for ecological damage to account. These eight systems and 45 sub-systems are detailed in Appendix 1.

2.3 The 13th Five Year Plan: a new dawn for Chinese environmentalism?

These two ecological civilisation papers were issued alongside the final drafting of the 13th Five-Year Plan (FYP) – the guiding socio-economic development plans issued every five years by the central government. Reflecting the ambition shown in the ecological civilisation papers, the 13th FYP was the most environmentally ambitious FYP to date and is another key text for understanding how China's green economy transition is implemented.

When the 13th FYP (2016-2020) was officially released in early 2016, there was much celebration. "What's exciting," reflected China climate expert Kevin Mo, "is that the government is taking an integrated approach, tackling air quality, climate change, and the development of a new model of growth together instead of treating them as separate issues."

This was also a time of great optimism within the international community for leadership from China on climate change following the 2015 Paris climate summit. Alongside these commitments to climate

and to building an ecological civilisation, the 13th FYP was seen as an ambitious break from old vested interests and economic policy–"instead of setting the old economy against the new," wrote China Daily, China was now committed to "how the old industries can help and be helped in the transition to the connected and sustainable service economy." China during the 13th FYP was seen as a "land of opportunity" for driving global green growth forward.

In the FYP, 10 of 25 priority targets were related to environmental policies – and all ten fell under a group of 13 binding targets for 2020. These 10 "obligatory" targets for 2020 are listed in table 4 below. They cover specific objectives for land management, water and energy consumption, renewable energy, CO_2 emissions, forests, air and water quality, and air pollution.

In addition, as with the ecological civilisation plans, the FYP sought to strengthen environmental governance through increased rule of law and

¹ The Chinese title of this document 生态文明体制改革总体方案 is officially translated as the "Integrated Reform Plan for Promoting Ecological Progress". However, this translation excludes the phrase Ecological Civilisation from the document (where ecological Civilisation is the focus of the Chinese-language title). I have therefore used the translation from Goron 2018 here.

"Ecological civilisation is now enshrined in China's constitution. This firmly places ecological civilisation as both a practical pathway to a green economy and central to the vision for China's modernisation."

institutional integration. The plan included setting up environmental protection and law enforcement agencies across regions, requiring corporations to self-monitor emissions and disclose information on compliance with environmental regulations, and establishing a national carbon-trading market.

The ecological civilisation vision outlined in the two documents and the 13^{th} FYP is now enshrined in China's constitution. This firmly places ecological civilisation as both a practical pathway to a green economy and central to the vision for China's modernisation.

Table 4: 10 obligatory environment targets in China's 13 th FYP (2016-2020)		
1. Arable land: retain 2015 levels (millions of hectares)		
2. Increase in land newly designated	for construction (millions of hectares)	<2.17
3. Water consumption per unit of GD	P (%)	-23
4. Energy consumption per unit of GD	DP (%)	-15
5. Non fossil energy share (% primary energy supply)		15
6. Carbon dioxide emissions intensity per unit of GDP (%)		
7. Forest Growth	Coverage (%)	1.38
	Growing stock (billions cubic metres)	1.4
8. Air Quality	Days with good urban air quality in cities at or above Prefecture-level	>80
	Reduction of PM2.5 concentration in substandard cities at or above Prefecture-Level (%)	-18
9. Surface water quality	Surface water of at least Grade III quality (% of monitored sections)	>70
	Surface water of at least Grade IV quality (% of monitored sections)	<5
10. Main air pollutant emission reduction (% change since 2015)	S02	-15
reduction (70 change since 2013)	COD	-10
	Nox	-15
	Amonia	-10

Box 4 Modernisation in a Chinese context

It is essential to note here that, unlike in many other localities, the notion of "modernisation" in China is not synonymous with Westernisation. Instead, it is about a destined and natural return to its rightful past eminence through rapid sociocultural change.

This process of modernisation is especially dominant since the 1980s, but has been is an essential part of Chinese nationhood, as well as Chinese personal identity, stretching back at least for the past 200 years since the Century of Humiliation by foreign powers in the 19th century.¹

The guiding "vision" of ecological civilisation as not merely a technical approach, but a structural, social and cultural reshaping of Chinese governance, can be seen as tied closely with Xi's wider vision of

modernisation. In shaping China's return to ascendant "middle" role in world affairs, Xi requires from ecological civilisation a combination of old values of civilisation, culture, and nature, along with impetus for modern digital infrastructure and technocratic policy, all within a rubric of a stronger, more centralised Party governance.

Containing these many competing aims within the ecological civilisation concept partly explains its complexity, and why external observers can find it difficult to parse ecological civilisation in the context of a wider international green economy discourse which is by necessity stripped of the ancillary national, cultural and political objectives of such domestic importance to ecological civilisation.

1 See Rafatjoo, A. (2020). A Century of Humiliation In Modern China (pp. 75-79). Palgrave Macmillan, Cham.

We can further see that ecological civilisation reforms are central in China's modernisation vision put forward by Xi Jinping in 2017–the "Chinese Dream of national rejuvenation", in which China is steered by "socialism with Chinese characteristics for a new era".

Within this, the Party has laid out three strategic goals (detailed in Table 5 below) for achieving socialist modernization in China. They can be summarised as follows: By 2020, China has achieved a "moderately prosperous society" by eradicating poverty; by 2035, China will realise basic modernisation, with specific targets for economic growth, technology, governance systems and capacity, soft power, inequality, and environment; and by 2050, China will develop into "a great modern socialist country that is prosperous, strong, democratic, culturally advanced, harmonious, and beautiful" with further targets for governance systems, common prosperity, social welfare and global influence. These "three strategic goals" further overlap with the "Two Centenary Goals" (see Table 5).

If we understand ecological civilisation to be a green economy vision crucial to China's modernisation, we must also understand ecological civilisation as integral to achieving national, and even global ecological security. The Ecological

Civilisation Opinion Paper specifies the need to "accelerate the construction of ecological security shelters and establish the strategic pattern of ecological security" in a range of "key ecological functional areas as the essential backbone".

Reform is essential, argues the Paper, not only for China's future, but for addressing climate change and "safeguarding global ecological security".

"If we understand ecological civilisation to be a green economy vision crucial to China's modernisation, we must also understand ecological civilisation as integral to achieving national, and even global ecological security."

The notion of security in these policy documents is usually interpreted along traditional ecological terms (as e.g. the threats of climate change or resource depletion) or in terms of social risks (a clean environment being "vital to the people's wellbeing" and associated social unrest linked to environmental pollution).

However, the focus on security also <u>underscores</u> the inherent risks of conflict (both within China and between China and the world) as leaders push

through the contentious process of overcoming vested interests and realising structural changes. Xi has indeed succeeded like no other leader in recent Chinese history in "justifying the centralization of power and the establishment of central organizations to deepen reforms comprehensively and coordinate internal and external security".

In this section, we have explored how the concept of ecological civilisation is currently promoted by Chinese leaders as a vision and blueprint for green economy transition that is integral to China's modernisation. We have also seen how ecological civilisation is driven by reforms in governance, rule of law, Party control and increased attention to internal and external security.

Understanding these drivers is crucial context for understanding progress and remaining challenges in China's green economy transition, which is discussed in the next section.

"The focus on security also underscores the inherent risks of conflict (both within China and between China and the world) as leaders push through the contentious process of overcoming vested interests and realising structural changes."

Table 5: Three strategic goals to realise the "Chinese Dream"					
Year	Goal	Targets			
2020	Moderately prosperous society	All provinces to be above poverty line, "ensuring that people's basic needs are met and that their lives are generally decent"			
	, , ,	A doubling of the 2010 per capita income.			
		Economic and technological strength increased significantly. China becomes a global leader in innovation.			
		Modernization of China's system and capacity for governance is basically achieved.			
2035 (mid-goal)	Realise socialist modernisation	Soft power has grown much stronger; Chinese culture has greater appeal.			
(mid godi)		People are leading more comfortable lives, with more middle-income, reduced inequalities, and equitable access to basic public services.			
		Fundamental improvement in the environment; the goal of building a Beautiful China is basically attained.			
	A prosperous and modern socialist country with global influence	New heights are reached in every dimension of material, political, cultural and ethical, social, and ecological advancement.			
		Modern system and capacity for governance.			
2050		Become a global leader in terms of composite national strength and international influence.			
		Common prosperity for everyone.			
		People enjoy happier, safer, and healthier lives.			
		China a proud and active member of the community of nations.			

3. Ecological civilisation progress & challenges in 2020

Key insights

- 2020 marked a new phase for several of China's internal milestones for ecological performance and planning, and heralded a new central focus on innovation, green technology and digital.
- The COVID-19 pandemic and worsening China-US relations knocked an optimistic trajectory towards CBD COP15 off-course, with the Biden administration currently unlikely to correct this slide.
- Ambitious announcements by Xi Jinping for carbon neutrality by 2060 caught many off-guard, but in the background previously central ecological civilisation rhetoric appears to be being slightly de-emphasised in the 14th FYP and externally, in favour of "innovation driven development".

2020 was a key milestone year for China's leaders in the green economy transition, marking the end of the "startup phase" for the construction of ecological civilisation – all 4 ecological civilisation Targets set in the Opinion Paper (see Table 3) and all 8 Objectives (see Appendix 1) in the Ecological Civilisation Action Plan are expected to have been met by the end of 2020. It is also the final year of the 13th FYP (see Table 4) and is the final year for the first of the Two Centenary Goals and the Three Strategic Goals (see Table 5) to realise the Chinese Dream for a new era discussed above.

The coming five-year (2021–2025) period will be a key opportunity to consolidate progress in the green economy transition – and it will kick off action towards China's new 2060 commitment to carbon neutrality announced in September 2020.

This section will reflect on progress made against the green economy goals set for the crucial year of 2020 and explore achievements as well as persistent challenges in today's context of global economic decline, political disaccord and increasing nationalism.

"The coming five-year (2021–2025) period will be a key opportunity to consolidate progress in the green economy transition – and it will kick off action towards China's new 2060 commitment to carbon neutrality announced in September 2020."

3.1 Domestic progress under the FYP

By the start of 2020, 4 of the 8 systems (see Appendix 1) set out in the Ecological Civilisation Action Plan had been established – the accountability system, environmental governance system, resource-saving system, ecological conservation, and restoration system. The other four were expected to be complete by year end.

In the government Work Report delivered at the 13th National People's Congress in May 2020, the government boasted having met or exceeded all 38 targets from the previous year, including exceeding those for environmental pollution – sulphur dioxide and nitrogen oxide emissions fell by 4.4% and 3.5% respectively, while ammonia nitrogen emissions shrank by 3.3 percent from 2018.

In documents issued in October in preparation for releasing the 14th FYP, the CPC Central Committee declared that "a green way of production and life has been widely formed," citing various achievements including that "carbon emissions have steadily declined since reaching their peak, the ecological environment has been fundamentally improved, and the country's cultural soft power has been significantly enhanced".

The government Work Report claims that overall China has made significant progress on "three critical battles" (poverty, pollution and potential financial risks). On poverty, an additional 11 million were lifted out of poverty in 2019 alone, and as of December 2020, all remaining poverty-stricken counties had been delisted, allowing China to declare a "major victory in poverty alleviation."

On pollution and environment, the Work Report says that "We made solid progress in keeping our skies blue, our waters clear, and our land pollution-free." PM2.5 decreased by 2.4% in cities; the proportion of surface water with a quality rating of Grade III or higher stood at 74.9%; and non-fossil fuel share of the total energy consumption reached 15.3% (and thus reached the 13th FYP target one year ahead of schedule); carbon dioxide emissions per unit of GDP decreased by 4.1%; Energy consumption per unit of GDP fell by 2.6%, and water consumption per 10,000 yuan of GDP dropped by 6.1%. See Table 6 for progress on wider environmental targets.

On financial risks, the Report focuses on those related to "the hidden debts" of local governments and the debts of enterprises and "the disorderly growth" of shadow banking. It also addresses risks in financial institutions, internet finance, the financial market and improvements to the financial regulatory system.

As highlighted in the original Opinion paper discussed above, green technology and innovation is a central driver of progress in China's ecological civilisation. China's recent innovation trends suggest that green technology increasingly underpins nearly all sustainable development trends in China. The 2019 Government Work Report emphasises progress on "the innovation-driven development strategy" and claims enhanced "capacity for scientific and technological innovation," with China having risen to 14th place in the 2019 Global Innovation Index.

"Green technology and innovation is a central driver of progress in China's ecological civilisation. China's recent innovation trends suggest that green technology increasingly underpins nearly all sustainable development trends in China."

Table 6: 2019 Performance: Resource Conservation & Environmental Protection **Projected** Actual Unit **Rating Targets Type Figure** figure Billion tons 4.86 Total energy consumption Anticipatory of standard 4.82 approx As projected coal Not accomplished, Reduction in energy consumption per but in line with scheduled Obligatory % 3 approx 2.6 unit of GDP reduction Reduction in carbon dioxide emissions per unit of GDP Obligatory % 3.6 approx 4.1 Accomplished Share of non-fossil fuels in primary 14.6 Obligatory % 15.3 Accomplished energy consumption Reduction in water consumption per 5.1 Obligatory % 6.1 Accomplished 10.000 yuan of GDP 1000 hectares Land newly designated for construction 333.33 333.33 Accomplished Obligatory 1000 Includes: agricultural land Obligatory 283.33 283.33 Accomplished hectares 1000 Includes: cultivated land Obligatory 170.00 170.00 Accomplished hectares 1000 Increase in total cultivated land Obligatory 170.00 170.00 Accomplished hectares 1000 Afforestation of land Anticipatory 14,711.13 14,801.33 As projected Reduction in PM2.5 concentrations in cities at and above prefecture level that 2.0 Obligatory % 2.4 Accomplished fell short of the national standards for PM 2.5 concentrations Proportion of surface water with a Grade III or higher rating Obligatory % 71.3 74.9 Accomplished Proportion of surface water with a rating Obligatory % 6.0 3.4 Accomplished lower than Grade V % 2.0 3.2 Accomplished Reduction in chemical oxygen demand Obligatory Reduction in ammonia nitrogen Obligatory % 2.0 3.3 Accomplished Reduction in sulfur dioxide emissions % 3.0 Accomplished Obligatory 4.4 % 3.0 3.5 Accomplished Reduction in nitrogen oxide emissions Obligatory 95.0 95.7 Percentage of urban sea-age treated Anticipatory % As projected Percentage of urban household refuse Anticipatory % 98.0 99.2 As projected safely treated

"The unbalanced and inadequate development of China remains prominent... the gap between urban and rural areas in terms of regional development and income distribution is wide, ecological protection has a long way to go, there are shortcomings in people's livelihood security, and there are weaknesses in social governance."

The contribution to economic growth of "advances in science and technology" is estimated at nearly 60% of GDP, up from 55% in 2015, reflecting a "constant stream of significant" innovations throughout the year. These were spurred by various programmes including the Sci-Tech Innovation 2030 Agenda and other "major national science and technology programs", by efforts to turn Beijing, Shanghai and Guangdong-HK-Macao into "innovation centers". Notable innovations are highlighted in Table 7 and include space exploration, the digital economy, and the development of clusters of "strategic emerging industries".

The recent Recommendations of the CPC Central Committee issued in 2020 on the drafting of the 14th FYP leave no doubts about innovation as a key guiding ideology. The documents heavily emphasise "innovation-driven development" and "green development", calling on China to "unswervingly implement the new development concept of innovation, coordination, green, openness and sharing". Specific sectoral guidance focuses on "green and low-carbon development", "improving environmental quality"; "improving the quality and stability of ecosystems"; and "resource utilization efficiency".

We will have to wait for the actual 14th 5YP to be issued in March 2021 to understand the implications of this language in terms of specific plans and targets. However, the Recommendations suggest that the "new development pattern" going forward will be green technology-driven innovation, with a focus on systematically building up the

domestic economy towards self-sufficiency, relying on boosting consumption through innovation-led improvements in quality, and efforts to better coordinate international engagement.

While Chinese leaders seem optimistic about reaching key environmental targets for 2020 (largely riding the successes achieved during the past few years under the 13th 5YP), the next five years and beyond seem characterised by ongoing struggle. In their Recommendations, the CPC reflect that "While China has shifted to a stage of high-quality development, with notable institutional advantages, improved governance, long-term economic growth, a strong material foundation, abundant human resources, broad market space, strong development resilience and stable social conditions, and multiple advantages and conditions for continued development," many challenges remain.

Namely, "the unbalanced and inadequate development of China remains prominent, the reform of key areas and key links remains a daunting task, and its innovation capacity has not adapted to the challenges of high-quality development ...the agricultural foundation is not yet solid, the gap between urban and rural areas in terms of regional development and income distribution is wide, ecological protection has a long way to go, there are shortcomings in people's livelihood security, and there are weaknesses in social governance."

3.2 International cooperation increasingly fragile

Whereas the last five-year plan was drafted at a time full of optimism for the ripe possibilities of China's leadership in green economic transition both at home and abroad, 2020 has panned out very differently. Optimism around Chinese leadership via hosting the Conference on Biological Diversity (CBD) COP15, and internationally dubbed "super-year for nature" has been overshadowed by caution, fear and suspicion caused by building animosity between the US and China, and the uncertainties of the global economic repercussions of the COVID-19 pandemic.

The Biden victory in the US presidential election currently seems unlikely to change this overall deterioration - with a strong US diplomatic catchup on climate appearing to be walled off from reparative efforts for fraught US-China relations. There will be no immediate repeat of the Obama-Xi climate diplomacy that set the stage for the Paris agreement in 2015 - for a UK hosted COP26, or persistently opaque Chinese planning for delayed a CBD COP15. The forthcoming 14th FYP, along with the 2020's carbon peaking and neutrality commitments, instead look to set the green economy agenda for China in 2021, though after a year and a half of unprecedented uncertainty, much will remain unclear until its publication in March 2021.

"The world today is undergoing major changes that have not occurred in a century," reflect the CPC in their Recommendations for the 14th FYP. In the context of "scientific and technological revolution", they observe, there is "a profound adjustment occurring in the balance of power in the

international arena... The international environment is becoming increasingly complex, instability and uncertainty have increased markedly, the COVID-19 pandemic has had widespread and far-reaching effects, economic globalization has suffered a backlash, and the world has entered a period of turmoil and change."

"Unilateralism and protectionism are increasing, international economic and trade rules are being challenged, and geopolitical risks remain relatively high. All this will increase external risks to China's development."

While Chinese leaders claim a "decisive victory" over COVID in Wuhan and assert that this "fully demonstrate[s] the strong vitality and great strengths of the CPC's leadership, of our system of socialism, and of our state governance system," they also admit that the pandemic poses serious challenges for the global community that are felt by China. "The world economy is heading toward a serious recession," they wrote in the 2020 Work Report, "and instabilities and uncertainties are clearly increasing, while China has major challenges to address in pursuing economic development... Unilateralism and protectionism are increasing, international economic and trade rules are being challenged, and geopolitical risks remain relatively high. All this will increase external risks to China's development."

"Optimism around Chinese leadership has been overshadowed by caution, fear and suspicion caused by building animosity between the US and China, and the uncertainties of the global economic repercussions of the COVID-19 pandemic."

rgets	Туре	Unit	Projected Figure	Actual figure	Rating
ience & Technology					
Spending on R&D as a percentage of GDP	Anticipatory	%	2.20	2.19	As projecte
Number of patents per 10,000 people	Anticipatory		13.6	13.3	As projecte
Contribution of scientific and technological advances to economic growth	Anticipatory	%	59.2	59.5	As projecte
Percentage of mobile broadband users	Anticipatory	%	+99	96	As projecte
Percentage of households with fixed broadband internet access	Anticipatory	%	92	91	As projecte
lucation					
Retention rate of nine-year compulsory education	Anticipatory	%	94.6	94.8	As projecte
Gross enrollment ratio for senior secondary education	Anticipatory	%	89.4	89.5	As projecte
Regular undergraduate enrollment	Anticipatory	Million students	8.70	9.15	As projecte
Graduate enrollment	Anticipatory	Million students	0.933	0.917	As projecte

3.3 A waning commitment to ecological civilisation?

Within today's global challenges, China's commitment to green economy transition will be put to the test. It is notable that though ecological civilisation remains a buzzword in some of China's international outreach (e.g. central to its hosting of the upcoming CBD COP meeting on the theme of ecological civilisation, but peripheral in rhetoric around recent EU-China climate diplomacy), the term did not show up heavily in central government rhetoric in 2020. As mentioned above, the "new development pattern" discussed in the CPC Recommendations for the 14th FYP is not ecological civilisation but "innovation-driven development".

While ecological civilisation receives passing mention only four times in the CPC Recommendations for ("promoting the overall layout of economic, political, cultural, social and ecological civilization construction"), previously out of fashion terms such as "green" and "sustainable" development seem to be making a come-back.

Under section 10 of the Recommendations, titled "Promoting green development and harmonious coexistence between man and nature," work on establishing the Ecological civilisation system is couched between commitments to "implement the strategy of sustainable development" and "promote all-round green transformation of economic and social development".

"Internal stability and security remains the primary objective for the CCP, and ecological civilisation's relative position amongst competing priorities reflects a shuffling of the Party's vision of the kind of policy outcomes that are important for its legitimacy."

Likewise, though the high-level government Report for 2020 emphasises core environmental values and highlights major progress in all areas previously outlined in the previous ecological civilisation policy papers, the term "ecological civilisation" was not mentioned once. Instead, the emphasis was on "coordinated development" efforts and plans set out in different regions, referring to some ecological integration in development objectives.

Furthermore, alongside celebrating a reduction in fossil fuels, the report also touts the accomplishment of establishing the China Oil & Gas Piping Network Corporation in 2019, and brags, "We opened up markets for upstream oil and gas exploration and exploitation."

Similarly, in a key document issued in March 2020 outlining China's plan for continued economic reform, the "Guideline to accelerate improving socialist market economy in new era", there is less emphasis on green economy than anticipated.

The term "ecological civilization" appears only once in the 12-page document – and it is in the context of coordinating various fields of reform with economic reform (not as integral to economic reform). The goal of ecological civilisation here seems to be for social security – to address "people's increasing needs for a better life".¹

The terms ecological environment/protection together appear just four times, each time in the context of improving economic laws and regulations for better environmental outcomes (Key reforms specified in this economic reform Guideline are listed in Appendix 2).

If ecological civilisation's ascendancy as a central concept for the Party has stalled, then this is unlikely to be because of a fundamental shift in understanding on the importance of "global ecological security" in its own terms.

As ever, internal stability and security remains the primary objective for the CCP, and ecological civilisation's relative position amongst competing priorities reflects a shuffling of the Party's vision of the kind of policy outcomes that are important for its "output legitimacy".

"Although ecological civilisation remains a buzzword in some of China's international outreach, the term did not show up heavily in central government rhetoric in 2020."

¹ Rough translation by author from Chinese as no official translation has been issued at time of writing.

3.4 Standing at the crossroads: looking ahead

Leading environmentalist Ma Jun suggests that China is "at a crossroads for environmental protection", but remains optimistic on plans to modernise China's environmental governance.

Others agree that ecological protection and green development will remain priorities post-pandemic and point to a series of policy and legislative moves that China has taken this year "with far-reaching implications for its environmental governance system".

Specifically, they point to the "Guiding Opinions on Building a Modern Environmental Governance System" issued in March, which reaffirms and builds on the priorities set in previous ecological civilisation policy papers. These include a focus on leadership by the Party, rule of law, transparency, market mechanisms, and multi-stakeholder governance.

It also helpfully outlines the roles of different stakeholders in environmental protection and lays

the groundwork for further environmental governance reform over the next Five Year Plan. Key actions are specified to be completed by 2025, including 28 key points for reform across seven fields including government supervision, corporate responsibility, and public participation. These reforms and actions are re-affirmed in the CPC Recommendations for the $14^{\rm th}$ 5YP.

When we look at progress in China's green economic transition by its own metrics, therefore, we see concerted efforts and tangible results. However, looking ahead, these commitments feel challenging, and some actions point away from ecological progress.

The next section will draw on this discussion of China's own framing of and implementation of ecological civilisation and ask what contributions it can usefully make to a global green economy – and to efforts to green the pandemic recovery efforts – going forward.

"When we look at progress in China's green economic transition by its own metrics, therefore, we see concerted efforts and tangible results. However, looking ahead, these commitments feel challenging, and some actions point away from ecological progress."

4. Eco-civilisation for a global green economy?

Key Insights

- The ecological civilisation vision has accelerated an integrated, structural and governance-led approach to green economy policymaking in China.
- An emerging marriage of Chinese domestic vision with international ambitions can be seen in China's commitments to the UNFCCC and progress on biodiversity targets under the SDGs.
- Chinese leadership has skilfully used ecological civilisation discourse to legitimise international environmental protection objectives at home by appealing to deeprooted traditional cultural values, without appearing to bow to international pressure.
- Ecological Civilisation ultimately amounts to something larger than a policy agenda: a
 high-level vision in simultaneous alignment and competition with green economy, but
 with a much wider social-technical scope and distinct Chinese characteristics suited
 to a domestic audience.
- Whether there will be an international role for ecological civilisation is still unclear, but any hope of engaging with Chinese visions of green economy – at home or internationally – requires understanding its priorities of stability, legitimacy and security.

In this paper, we have begun an examination of China's concept of green economy through its leaders' vision of ecological civilisation. While the data presented in the GEC's Green Economy Tracker helps to benchmark China's green economy transition – against other countries, and against the emerging consensus of a global framework of inclusive green economy and green growth – it is important to understand the ecological civilisation vision from an internal perspective.

This is an essential vantage point for understanding the Chinese experience of the transition, and can help understand more clearly the challenges and opportunities for China – and for others working with China – going forward.

Through this discussion, we have seen how historical thinking on environmental problems and solutions in China has been closely integrated with economic problem-solving for most of the past five decades. Further, we noted that China's environmental policymaking largely mirrors the global evolution of green policymaking.

We saw how Xi's regime differs from his predecessors, none of whom placed governance reforms at the heart of green economy transition as he has done. We examined key policy

documents for ecological civilisation and saw how the current commitment to constructing a comprehensive system of ecological civilisation aims to reform the very structure of the economy. Furthermore, we explored how ecological civilisation is both crucial to China's modernisation and integral to its vision of achieving national, and even global ecological security, driven by reforms in rule of law, party control and increased attention to internal and external security.

Taking stock of progress made up to the key milestone year 2020, we reflected that the 13th FYP (2016-2020) – drafted alongside the current ecological civilisation vision – facilitated improving both the quality of China's environment and strengthening the governance

mechanisms to support a transition to a green economy in the ecological civilisation vision.

The imminent national carbon market (even if looser than expected at launch) will be a significant milestone, as will deepening green finance ambitions around a stronger taxonomy for green bonds and investments. Many have hailed China's recent pledge for carbon neutrality by 2060 – and there is general consensus that though challenging, China can make it happen and that doing so would comprise "a core component of solving the climate challenge" as it would "align with global projections for what's needed to achieve the goals of the Paris Agreement".

4.1 Necessary but insufficient progress

In emissions and beyond, most agree with the OECD's assessment that "China has made great strides towards improving the environmental and resource productivity of its economy." However, most –both in and outside of China – would also agree that more needs to be done to achieve "greater efficiency gains that are vital to the shift to a low carbon, resource efficient and competitive economy."

Despite movement in the right direction, China's environmental pressures are continuing to increase and current policies "remain insufficient to cope". Thus Xi's focus on alignment of policies and the trend toward integrated, structural environmental governance discussed in this paper looks to be crucial going forward.

Looking beyond 2020, as China now moves out of the "start-up" phase of green economy transition, the world is increasingly looking to the country for environmental leadership on the global level. In today's context of political discord, increasing nationalism, and pandemic-induced global economic decline, the threat to the planet posed by uncontrolled species extinction and climate change feels greater than ever.

As the EU promotes its European Green Deal and the global community explores how to "build back greener", China too, has been asserting itself in global environmental governance, framing its global ecological civilisation vision in the same terms as it does domestically – around the need for, as Xi Jinping challenges, China to "play our part in ensuring global ecological security".

Chinese researchers <u>suggest</u> that, if ecological civilisation is implemented effectively, "China will have in place a fully functional comprehensive and systematic approach to the conservation and restoration of ecologically important lands, services and environments that will be the underpinning of an Ecological Civilisation and will also lead the world in practice".

"Despite some movement in the right direction, China's environmental pressures are continuing to increase and current policies remain insufficient to cope."

4.2 Greening the Belt and Road Initiative

Many are playing close attention to the implications of ecological civilisation for efforts to green the Belt and Road Initiative (BRI: see Box 2) – which ultimately are rooted in the same vision. At the Plenary Session in October, the CPC reflected that BRI has been "fruitful" and committed to a "high level of opening up to the outside world" in order to "open up a new situation for win-win cooperation".

Specific commitments highlighted in these documents include "deepen cooperation in public health, digital economy, green development, science, technology and education, and promote cultural exchanges". Likewise, the 2020 government Work Report emphasises "stepped up efforts" on China's integration with the global economy, citing the formal launch in 2019 of the BRI International Green Development Coalition and further progress on developing the Digital Silk Road and Silk Road E-Commerce, though details are still vague.

This links with a broader trend central in the recommendations for the 14th FYP around an emerging twin-focus on green and technological investment – future facing so called "neo-infrastructure", a mirror of the European Union's focus on green and digital industrial policy.

International trade has continued to grow rapidly, and the Report emphasises progress on "high quality" trade and "innovative development" of trade in services. These efforts are a crucial channel for China's ecological civilisation concept to contribute to improved global environmental governance, because, as researchers at Tsinghua University have pointed out, key BRI countries "are currently on track to generate emissions well above 2-Degree Scenario levels, the upper limit of the Paris Agreement's temperature increase target."

Failure to green the BRI projects, they argue, "could be enough to result in a nearly 3 degrees of warming pathway to 2050, even if all other countries follow a [2-Degree Scenario] pathway". Crucially, the scope of China's recent 2060 carbon neutrality pledge does not include emissions by Chinese actors overseas. Thus greener investments supported by a greening of China's BRI agreements will be crucial to achieving the Paris Agreement.

Going forward, achieving this will ultimately require leaders to address the governance problems at the heart of many problematic BRI investment projects – to better integrate decision- and rule-making in the same way they are doing domestically for the construction of ecological civilisation.

"If ecological civilisation is implemented effectively, China will have in place a fully functional comprehensive and systematic approach to the conservation and restoration of ecologically important lands, services and environments."

4.3 Strengthening international environmental cooperation

The characteristics of this new marriage of Chinese domestic eco-vision with international ambition can be seen clearly in China's commitments to the UNFCCC. In a MEE statement of commitments and actions following the UN Climate Action Summit, officials first drew the link between China's modernisation and the need for ecological protection, arguing that "Advancing ecological progress is vital for the sustained development of the Chinese nation."

"Chinese leadership is also actively looking to help shape the contemporary ecological narrative globally, seeing this effort as integral to both its own environmental interest and international ecological security."

The language was fully empowered and reflective of a driving, leadership position, with China "injecting robust political impetus into international cooperation" and declaring that "China actively pushes for all parties ... to fully recognize the ecological value of earth". For the most part, the international community has largely embraced this about-face in China's engagement with global environmental governance, with recent efforts in the UNFCCC receiving much praise.

Another area where we can look at China's integration of global environmental governance with domestic conservation priorities is in China's National Plan on Implementation of the Sustainable Development Goals (SDGs), and in particular those plans for SDG Goals 14 (ocean conservation) and 15 (terrestrial conservation), which outline specific targets for marine and terrestrial biodiversity conservation.

In a progress report issued by the Ministry of Foreign Affairs of the People's Republic of China in 2017, authors state the 2020 SGD goals are on track to be met, including work started on the 2030 targets: "Prioritizing conservation and focusing mainly on natural restoration, China has promoted the protection and restoration of the natural ecosystem, built ecological corridors and biodiversity protection networks, and comprehensively improved stability and ecological service functions of all kinds of natural ecosystems, consolidating ecological security."

Through its National Plans on biodiversity and the Plan for SDG implementation, we see that China has a clear national approach to setting targets for biodiversity conservation that are aligned with global goals. These targets have pushed tangible progress towards curbing biodiversity loss within China, and set a hopeful outlook for China's potential leadership during development of the post-2020 biodiversity framework.

"Chinese policymakers are committed to the construction of ecological civilisation – not least because they clearly see the competitive edge of investing in a green economy. But ecological civilisation is, at the end of the day, a high-level green economy vision, rather than a set plan with a roadmap."

"That China chose to assertively announce environmental policy commitments in advance of the US election – and despite difficult relations – shows a further level of commitment to action, and potentially the newest salvo of green industrial competition between China and an environmentally active Biden administration."

Beyond practice, Chinese leadership is also actively looking to "help shape the contemporary ecological narrative" globally, seeing this effort as integral to "both its own environmental interest and international ecological security". Ecological civilisation is presented as the framework for this vision, with leadership arguing that "ecological civilisation could provide an alternative development theory capable of revolutionising the ecocidal global economic order and bring about a global ecological transition". This adoption of ecological civilisation at the global level signifies a complete reversal in the Chinese framing of its global environmental responsibility.

As Goron observes, "discourse that had hitherto presented binding environmental norms as disguised Western Imperialism" has now been abandoned in the ecological civilisation discourse. This reversal has been possible through skilful work by Chinese leadership who have found a means of appealing to deep-rooted traditional cultural values in the ecological civilisation vision. In doing so they have legitimised environmental protection without appearing to bow to international pressure.

4.4 Ecological authenticity – does China mean it?

The most important question remaining for observers of this new kind of "sino-ecological diplomacy" – does China mean it? With Xi's recent further commitments to carbon neutrality, it is now clear that China now firmly views global well-being – including ecological well-being – as integral to its own well-being.

As noted earlier, that China chose to assertively announce environmental policy commitments in advance of the US election – and despite difficult relations – shows a further level of commitment to action, and potentially the newest salvo of green industrial competition between China and an environmentally active Biden administration.

Ecological civilisation must therefore be taken seriously as a conceptual distinct alternative to visions of green deals, inclusive green growth, and green economy – albeit one spread thinly across its broad rhetorical scope, extending from civilising good governance and anti-corruption at a social extremis, to a digitalisation neoinfrastructure focus at its opposite technocratic edge.

Those looking for specific Chinese green policy proposals that are primed to influence environmental policymaking are instead looking towards ecological "redlines" as an approach set to be expanded into new contexts to integrate social, economic and environmental considerations.¹

¹ We hope to explore this and implications for CBD in more detail in an upcoming paper.

Box 5 Issues to watch and future research questions

Many open questions related to ecological civilisation remain unresolved, several of which we outline below and we hope to address in a successive paper focused on nature, CBD and the 14th FYP, pending expected release of further information in early-mid 2021.

- Given its current gearing towards internal Chinese governance and a domestic audience, will there be further efforts to "internationalise" ecological civilisation toward a global environmental paradigm and framework for further policy action?
- To what extent would an "internationalised" ecological civilisation influence Chinese ambitions for shaping existing global environmental governance processes – such as CBD COP 15, UNFCCC COP 26 and the SDGs – as well as ongoing eco-diplomacy efforts with

- EU? Will the narrower policy instrument of ecological "redlining" be more prominent than Eco Civ?
- How should we expect further development of the green-digital/innovation strand of Chinese policy making given its status as a priority area of the 14th FYP? Are there unexamined social justice implications of a centralising, digital green approach that tends toward coercive environmentalism – and a missing corollary to international "inclusive" green growth/green economy discourse?
- To what extent has eco civilisation's anticorruption, governance-centred environmental policy succeeded in increasing effectiveness of environmental policies through compliance and rule of law?

"It is less clear whether the ecological civilisation discourse-backed policies and reforms within China are enough to match the challenges required to drive meaningful ecological transition."

While ecological civilisation narratives will continue to shape a Chinese vision of green economy, it is less clear whether the ecological civilisation discourse-backed policies and reforms within China are enough to match the challenges required to drive meaningful ecological transition both within China, and diplomatically in China's global engagements with UNFCC, CBD and beyond.

Though discourse on ecological civilisation has been weaker during 2020 and the pandemic, it is too early to tell whether this is a shift away from the commitment to reshape the economy along ecological terms.

Veterans of Chinese environmental policymaking are accustomed to a process of two steps forward, one step back in the long arch of progress. Chinese policymakers do mean it when they say they are committed to the construction of ecological civilisation – not least because they clearly see the competitive edge of investing in a green economy.

But ecological civilisation is, at the end of the day, a high-level green economy vision, rather than a set plan with a roadmap. It is a vision that cuts to the heart of a tension in Chinese governance – between the science of "obeying the law of nature and protecting nature", and the moral self-image of the Party as able to and destined to control and dominate nature. So the roadmap and plan is ultimately in the messy process of governance reform rooted in Chinese domestic priorities for stability, legitimacy and security in this final push for modernity.

Where global efforts toward a green economy transition can meet China from this starting point and these priorities, we will succeed in overcoming global boundaries. Where we try to impose a different starting point, we will fail.

Afterword

"Step by step, target by target, demonstration project by demonstration project, China is realising its vision for innovative new systems for ecologically sound, carbon neutral, and socially just economies."

On a work trip to Beijing in December 2019 from my current home-base in London, I continue to search for answers. But my questions have changed. I'm no longer convinced I can "save the planet" through my work engaging with Chinese environmental policy and practice. China is still facing tremendous environmental challenges, and still has fewer resources per capita than nearly any other country on Earth.

But leaders now have a plan to address these challenges, and along the way they continue to seek input and collaboration – with civil society, companies and researchers like me. Step by step, target by target, demonstration project by demonstration project, China is realising its vision for innovative new systems for ecologically sound, carbon neutral, and socially just economies.

But as I walk the newly-paved streets of the neighbourhood I'm staying in the North Fifth Ring Road, the edges of the optimism that hung in the air in the 2000s has hardened somewhat. The world is increasingly divided, and I am increasingly questioning the mechanisms through which the global community can overcome these divisions to ultimately solve the most pressing challenges the planet faces.

I return to GEI and meet with my former boss, a few remaining old colleagues, and many new faces. Having just marked its 15th anniversary, GEI is now a veteran among the Chinese NGOs. It now sits in a shiny office in the Chaoyang District and continues

to support community development, while increasingly leading high-level cooperation and policy change pushing forward solutions for a green economy, "promot[ing] economically, environmentally and socially viable development around the globe".

In meeting after meeting, interview after interview across Beijing, I hear about targeted research and innovative engagements with Chinese policymakers, skilful efforts to push forward better outcomes in the upcoming Kunming CBD and Glasgow UNFCCC COPs, and track strong flows of goods and information facilitating this progress.

But I also hear of new challenges with a marked shrinking space for civil society – particularly in the environment sector where the government is now flexing its muscles. Friends, work partners and taxi drivers share their concerns over the "soulless" atmosphere in Beijing, as well as the increasing tensions with the US, reflecting a general incredulity at the crumbling governance in the West.

"It wasn't until my own London office shut in March and I watched the same wrenching stories play out on repeat around the globe, that I once again learned the cost of 'othering' the Chinese experience in today's interconnected world."

And an email headlining the discovery of a novel coronavirus in Wuhan does not go unnoticed, as memories come flooding back of my tumultuous evacuation from fieldwork in Harbin during the 2003 SARS epidemic.

Back in London in January I stay glued to my phone with a permanent tightness in my throat as I devour news stories, podcasts and social media discussions of the developing pandemic spreading throughout China.

Devastated by the desperation of so many, and determined to understand day to day what all of this would mean for China and my work in this field, I lost sight of what it would mean for the world. It wasn't until my own London office shut in March and I watched the same wrenching stories play out on repeat around the globe, that I once again learned the cost of 'othering" the Chinese experience in today's interconnected world.

We are all integrally connected as never before. The planet depends on us to understand this and each other – and act accordingly.

- Lila Buckley

Appendix 1

Eight areas for systemic reform in the construction of Ecological Civilisation

8 Systems	45 sub-systems		
1. A system of property rights for natural resource assets will be established, according to which ownership is clearly defined, powers and responsibilities are explicit, and regulation is effective, in order to ensure there are owners for natural resources and ownership is clear.	 Establishing a unified system for determining and registering ownership Establishing a system of property rights for natural resources within which rights and responsibilities are explicit Improving the state system of management for natural resource assets Exploring the establishment of a system for exercising ownership rights at different levels; Launching trials for determining property rights for water flows and wetlands 		
2. A system will be built on the basis of spatial planning for the development and protection of territorial space, drawing on regulation of its uses as the main approach, with a view to stopping the over-use of quality cropland and ecological space, ecological damage, and environmental pollution caused by disorderly, excessive, and scattered development.	 Improving the functional zoning system Improving the regulatory system for the use of territorial space Establishing a national park system Improving the system for regulating natural resources 		
3. A spatial planning system will be designed, with the main purpose of strengthening the spatial governance and improving its structure, which is nationally unified and better connected between different departments of government, and according to which management is divided between governments at multiple levels, in an effort to eliminate overlapping and conflicting spatial plans, the overlap and duplication of responsibilities between departments, and the issue of local authorities frequently changing their plans	 Formulating plans for territorial space Integrating municipal-level (county-level) plans and developing new approaches for formulating municipal-level (county-level) spatial plans 		
4. An effective, standardized, and strictly managed system that achieves complete coverage will be established for regulating total consumption and comprehensive conservation of resources, in order to address inefficiency and serious waste in resource consumption.	 Improving the systems for providing the strictest possible protection for farmland and securing the economical and intensive use of land Improving the system for the strictest possible management of water resources Establishing a system for total energy consumption management and energy conservation Establishing a system for protecting virgin forests Establishing a system for protecting grassland Establishing a system for protecting wetlands Establishing a system for closing off desertified land for protection Improving the system for developing and protecting marine resources Improving the system for managing the development and utilization of mineral resources Improving the system of resource recycling 		

- **5.** A system for payment-based resource consumption and compensating conservation and protection efforts will be established. The system will reflect market supply and demand, resource scarcity, the value of nature, and the need for intergenerational compensation, in order to address the problems of excessively low prices for natural resources and their products, the cost of production and development being lower than the social cost, and inadequate incentives for ecological conservation efforts.
- 21. Accelerating price reform for natural resources and their products
- 22. Improving the payment-based system for land use
- 23. Improving the payment-based system for mineral resource use
- 24. Improving the payment-based system for use of sea areas and offshore islands
- 25. Accelerating reform of resource and environmental taxes and fees
- 26. Improving the ecological compensation system
- 27. Improving the mechanism for utilizing ecological protection and restoration funds
- 28. Creating a recuperation system for farmland, grasslands, rivers, and lakes
- **6.** An environmental governance system which is oriented toward improving the environment, and which incorporates unified regulation, strict law enforcement, and multi-party participation will be developed in an effort to deal with weak capacity for pollution prevention and control, overlapping regulatory functions between government departments, powers not being in accord with responsibilities, and the cost of law violations being too low
- 29. Improving the pollutant emissions permit system
- 30. Establishing a mechanism for cooperation within a region in pollution prevention and control
- 31. Establishing systems and mechanisms for rural environmental governance
- 32. Improving systems for public disclosure of environmental information
- 33. Strictly implementing compensation systems for ecological and environmental damage
- 34. Improving the administrative system for environmental protection
- 7. A market system which allows economic levers to play a greater role in environmental governance and ecological conservation will be developed, with a view to addressing the slow development of market entities and market systems and low rates of public participation in ecological conservation
- 35. Fostering market entities for environmental governance and ecological conservation
- 36. Promoting the trading of energy-use rights and carbon emissions rights
- 37. Promoting the trading of pollution rights
- 38. Promoting the trading of water rights
- 39. Establishing a green finance system
- 40. Establishing a unified system for green products
- 8. An evaluation and accountability system will be developed to assess the performance of officials in ecological conservation and hold to account those responsible for ecological damage. This system will be designed to be fully reflective of resource consumption, environmental damage, and ecological benefits, and is to be built so as to correct the shortcomings in performance evaluations, narrow the gaps in responsibility systems, and improve poor accountability for ecological damage.
- 41. Establishing ecological conservation targets
- 42. Establishing monitoring and early-warning mechanisms for environmental and resource carrying capacity
- 43. Exploring the creation of balance sheets for natural resource assets
- 44. Auditing outgoing officials' management of natural resource assets
- 45. Establishing a lifelong accountability system for ecological and environmental damage

Ensuring Successful Implementation of the Reform to Promote Ecological Progress

- Strengthening leadership over the reform to promote ecological progress
- Launching pilot initiatives and explorative projects
- Improving laws and regulations
- Improving guidance on public communication
- Exercising stricter supervision over reform implementation

Appendix 2

2020 Chinese Government Guideline to accelerate improving socialist market economy in new era

Reform	Summary	Key actions	
Insist on public ownership as the mainstay and the joint development of Unwaveringly consolidate and development of the public economy, unwaveringly encourage, support, and guide the development of the non-public economy,		1.	Promoting the optimization of the layout of the state-owned economy and structural adjustment.
multiple ownership economies to en- hance the vitality of	explore various forms of public owner- ship, support the reform and develop- ment of private enterprises, and culti-	2.	Actively and steadily promote the reform of mixed ownership of state-owned enterprises
the microscopic main body		3.	Steadily promote the reform of natural monopoly industries
		4.	Create an institutional environment that supports the high-quality development of the non-public economy
Consolidate the basic system of market	comprehensively improve systems		Comprehensively improve the property rights system.
economy to ensure fair competition in the market	foundation for the effective operation	6.	Fully implement the market access negative list system
	of the socialist market economy.		Fully implement the fair competition review system
Build a more complete system of fac-	blete system of fac- for-based market allocation, we will accelerate the construction of a unified and open market system with orderly competition, promote the construction of factor market systems, and achieve factor price market determination, indepen-	8.	Establish and improve a unified and open factor market
allocation, and fur- ther stimulate the creativity and market vitality of the whole		9.	Promoting market-oriented reform of factor prices
		10.	Innovative market-oriented allocation of factors.
	fair allocation		Advance the quality and efficiency of the commodity and service markets
Innovate govern- ment management and service meth-			Construct a new mechanism for effective and coordinated macro-control
ods and improve the macroeconomic gov-	sion, social management, public services, and ecological environmental protection, innovate and improve mac-	13.	Accelerate the establishment of a modern fiscal and taxation system
ernance system	roeconomic regulation, and further improve macroeconomic governance capabilities	14.	Strengthen coordination of monetary policy, macro-prudential policy and financial supervision
		15.	Comprehensively improve the scientific and technological innovation system and organization system
		16.	Improve the industrial policy and regional policy system
		17.	Continuously optimize government services with the traction of a first-class business environment
		18.	Build a social credit system and a new type of supervision mechanism that meet the re- quirements of high-quality development

Adhere to and improve the people's livelihood security system and promote social fairness and justice	Adhere to the distribution according to work as the main body, multiple distribution methods coexist, optimize the income distribution pattern, improve the sustainable multi-level social security system, and make the reform and development achievements more fair and benefit all people	20.	Improve the income distribution system that reflects efficiency and promotes fairness Improve the social security system covering all people Improve the national public health emergency management system
Build a new level of open economic new system, promote reform and development by opening up	Implement a more proactive opening strategy, comprehensively connect with the international high-standard market rules system, and implement a wider scope, wider fields, and deeper comprehensive opening	23.	Focus on the construction of the "Belt and Road" to build a new pattern of opening up. Accelerate the construction of open highlands such as free trade pilot zones and free trade ports. Improve the high-level open policy guarantee mechanism. Actively participate in the reform of the
Improve the legal system of the socialist market economy and strengthen the guarantee of the rule of law	Taking the protection of property rights, maintenance of contracts, unified market, equal exchange, fair competition, and effective supervision as the basic guidance, we will continue to improve the socialist market economy legal system to ensure that there are laws that can be followed, laws must be followed, and violations must be investigated.	27. 28.	Improve the system of laws and regulations in the economic field Improve the guarantee mechanism of law enforcement and judicial administration on the market economy Comprehensively establish an administrative power restriction and supervision mechanism Improve and develop the market economy supervision system and supervision mechanism
Adhere to and strengthen the over- all leadership of the party to ensure the effective implementation of reform measures	Give full play to the party's core role of taking over the overall situation and coordinating the leadership of all parties, transform the institutional advantages of the party's leadership in economic work into governance effectiveness, strengthen the implementation of reforms and achieve results, and promote the continuous deepening of economic system reforms	31.	Uphold and strengthen the party's leader- ship Improve the reform promotion mechanism Improve the reform incentive mechanism

Suggested reading

Bao, Chuanjian, 2018. Ecological Civilisation: A discourse in the making. *China Daily*. Available at http://www.chinadaily.com.cn/a/201808/31/WS-5b88e59ca310add14f388e7e.html

CCICED 2016. China's Ecological Civilization and the World. *CCICED 2016 Issues Paper*. Available at http://www.cciced.net/cciceden/POLICY/rr/lssuespaper/201612/P020161214521507778827.pdf

Deng, Yanhua and Yang, Guobin, 2013. Pollution and Protest in China: Environmental Mobilization in Context (June 25, 2013). *The China Quarterly,* Vol. 214 (2013), pp. 321-36. Available at SSRN: https://ssrn.com/abstract=2248558

Economy, Elizabeth C., 2018. The Third Revolution: Xi Jinping and the New Chinese State. New York: Oxford University Press, 2018.

Ely, et. al. 2019. Low-carbon China: Emerging phenomena and implications for innovation governance: Introduction to the special issue, *Environmental Innovation and Societal Transitions*, Volume 30, 2019, Pages 1-5, ISSN 2210-4224. Available at https://doi.org/10.1016/j.eist.2018.05.001

Gao, Jixi, 2019. How China will protect one-quarter of its land. *Nature*. 23 May 2019. Vol 569. Page 457. Available at https://www.nature.com/articles/d41586-019-01563-2

Geall, Sam and Ely, Adrian, 2018. Narratives and pathways towards an ecological civilisation in contemporary China. *China Quarterly*, 236. pp. 1175-1196. ISSN 0305-7410

Goron, Coraline, 2018. Ecological Civilisation and the Political Limits of a Chinese Concept of Sustainability. *China Perspectives*. DOI: https://doi.org/10.4000/chinaperspectives.8463

Hansen, et. al., 2018. Ecological civilization: Interpreting the Chinese past, projecting the global future, *Global Environmental Change*, Volume 53, 2018, Pages 195-203, ISSN 0959-3780, https://doi.org/10.1016/j.gloenvcha.2018.09.014.

Marinelli, M., 2018. How to Build a 'Beautiful China' in the Anthropocene. The Political Discourse and the Intellectual Debate on Ecological Civilization. *Journal of Chinese Political Science*, 23(3), pp.365-386. Available at https://link.springer.com/content/pdf/10.1007/s11366-018-9538-7.pdf

Nature (editorial), 2019. Build a sustainable Belt and Road: China's vast Belt and Road Initiative is on course to reshape research in the global south. Science leaders everywhere must work to make it transparent, green and free of conflicts of interest. *Nature*. 569, 5. Available at www.nature. com/articles/d41586-019-01309-0

Neuweg, Isabella and Nicholas Stern, 2019. China's 14th Plan, sustainable development and the new era. Paper for the 20th China Development Forum. The Centre for Climate Change Economics and Policy (CCCEP) and The Grantham Research Institute on Climate Change and the Environment. Available at http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2019/05/Chinas-14th-plan-sustainable-development-and-the-new-era.pdf

Pan, Jiahua, 2018. Building an Ecological Civilization in the New Era: Cognition, Development Paradigm and Strategic Measures. *Chinese Journal of Urban and Environmental Studies*, 6(02), p.1850009. Available at https://www.worldscientific.com/doi/abs/10.1142/\$2345748118500094

Roach, Stephen 2019. Sustainability with Chinese Characteristics. *Project Syndicate*. 23 September 2019. Available at https://www.project-syndicate.org/commentary/china-demonstrating-climate-leadership-by-stephen-s-roach-2019-09

UNEP 2016. Green is Gold: The Strategy and Actions of China's Ecological Civilization. The United Nations Environment Programme (UNEP). Available at https://reliefweb.int/sites/reliefweb.int/files/resources/greenisgold_en_20160519.pdf

Weng, Xiaoxue, Zhanfeng Dong, Qiong Wu, and Ying Qin 2015. "China's path to a green economy: Decoding China's green economy concepts and policies." *Country report. IIED,* London. Available at https://pubs.iied.org/16582IIED/

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