

# The problem of the impact of the concept of Chinese Ecological Civilisation upon environmental policy in the contemporary China

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**Abstract:** *This dissertation touches upon the relevance of the concept of Chinese Ecological Civilisation as a guiding principle for recent transformations in key fields of socio-economic and environmental governance in the People's Republic of China. Based on a range of academic literatures and current sources on Chinese policies in the respective areas of governance, it is argued that Chinese Ecological Civilisation has been integral to understanding directions of policy change in the context of the ongoing re-evaluation of goals and priorities of China's societal development in the contemporary era. The results of the study indicate that the discourse of Chinese Ecological Civilisation may have been implemented both explicitly and implicitly by Chinese policymakers, as demonstrated by a range of policies and regulations pointing toward this inference. In so doing, analysing the applications of the tenets of Chinese Ecological Civilisation to specific policy directions may be considered fruitful in the context of their further analysis.*

**Keywords:** *Civilisation, Socio-Economic, Innovativeness*

## 1. Introduction

### 1.1. Research background

The development of contemporary approaches to environmental policy and environmental governance worldwide has recently been influenced by a greater emphasis on the need for a comprehensive transformation of the whole societies toward more sustainable and ecological foundations for their livelihoods. In this respect, the People's Republic of China is scarcely an exception, as the country has been experiencing an apparent ecological crisis as a counterpart to its rapid and intense socio-economic development drive in the previous decades<sup>[1]</sup> (see, e.g., Jiang et al. 2019; Wang et al. 2019). In this context, the rise of the concept of the Chinese Ecological Civilisation to the rank of one of the major pillars of Chinese environmental and socio-economic governance-related thought and practice in the recent decades may be considered to be reflective of the salience of the same principle in the Chinese context. The latter has been gradually introduced between 2007 and 2012 to become one of the key elements of the official ideology of 'socialism with Chinese characteristics', as the concept of the ecological civilisation has become enshrined in the Constitution of the People's Republic of China and has been directly referenced in some of the country's major policy documents, such as Five-Year Plans<sup>[2]</sup> (Marinelli 2018). Accordingly, there is a need to further specify the role of the concept of Chinese Ecological Civilisation and the relevant principles of governance in the context of particular regulations and policies issued by the Chinese government in the period under consideration, so as to better evaluate the concept's relevance to the actual policy on the ground.

### 1.2. Research questions

The following research questions have thus been devised to underpin the process of this research.

(1) What are the main tenets of the concept of Chinese Ecological Civilisation as applied to the field of socio-economic governance in China?

(2) To what extent has the concept been integrated into policy documents and regulations related to the field of environmental policy of the People's Republic of China?

(3) How may the conceptual framework of Chinese Ecological Civilisation influence the policy-making process and practices of state governance in contemporary China?

### 1.3. Research aims and objectives

Based on the aforementioned, this research aims to establish the extent to which the concept of Chinese Ecological Civilisation has been integrated into the context of the development of Chinese policy making in the field of environmental and developmental governance. Additionally, further aim of this research is to provide for an understanding of the possible contradictions / discrepancies within the respective policies and regulations as patterns of meaning and tendencies associated with the concept of Chinese Ecological Civilisation may likely be juxtaposed against other conceptual formulations, such as the ones focussing on economic growth. With this in mind, the following research objectives have been proposed:

(1) To identify the prevalence of the policy directions associated with the tenets of Chinese Ecological Civilisation in the respective policies and regulations.

(2) To clarify the relative importance of such policy directions to the policies and regulations in question.

(3) To assess the degree of divergence / coherence between the rhetorical principles of Chinese Ecological Civilisation and specific policy targets being pursued in their name.

### 1.4. Structure of the dissertation

With this in mind, the present dissertation has adopted a 5-chapter structure. Chapter 1 presents this introduction to the work at large, with the focus on research questions, aims, and objectives informing the study. Following this, Chapter 2 introduces and reviews the literature being of importance to the present study, with a view to identifying the research gap relevant to the present study. In turn, Chapter 3 provides a review of the research methods underlying the present research. Finally, Chapter 4 contains a presentation of the research findings as arrived at in accordance with the methodology that has been proposed, and Chapter 5 provides for a discussion of those findings and a range of conclusions and recommendations for future research. Hence the process of the study has been captured and reflected in terms of this structure.

## 2. Literature Review

### 2.1. Chinese Ecological Civilisation as a concept: history and first years

The emergence of the notion of the ecological crisis in China has led to a gradual re-evaluation of the economic growth-oriented model of the country's development, which used to be the determinant of the latter's logic in the aftermath of the 1978 market socialist reforms (Kuhn 2019). In this context, the notion of ecological civilization (*shengtai wenming*,) has in recent years become an essential component of Chinese environmental policy-making and political rhetoric in general<sup>[3]</sup> (Goron 2018; Hanson 2019; Geall and Ely 2018). Therefore, the present literature review examines the key aspects of Chinese Ecological Civilisation (hereinafter referred to as the EC) in the context of environmental policy of the People's Republic of China. However, in order to approach that task, the focus on the concept's definition and narrative development will be necessary.

As noted by Geall and Ely (2018), the EC as a concept would both follow in the footsteps of the previous three 'civilisation' concepts in contemporary Chinese political discourse, namely "spiritual civilization" (*jingshen wenming*), "material civilization" (*wuzhi wenming*) and "political civilization" (*zhengzhi wenming*)" (Geall and Ely 2018, 10). Nevertheless, the authors observe that a major difference between the EC and the previously developed concepts in question concerns the former's focus on the global dimension of environmental challenges faced by China and the scope of political and collective behaviour changes being presaged. The perceived innovativeness of the EC would hence lie in its attempt to develop an alternative environmental policy discourse that would challenge the Western notion of sustainable development (SD), hence underscoring the political aspect of the Chinese Communist Party's (CCP's) attempts to present the EC as a specifically Chinese perspective on global environmental policy issues. Therefore, these two aspects of the concept's implementation will need to be taken into account here.

Nevertheless, it is worth noting that the EC has been for the first time introduced into the Chinese academic discourse independently of its future political significance, being in effect derived from the late Soviet discussions about the future of ecological agrarian development in the late 1980s (Ye, 2006). Ye

(2006) was among the first Chinese scholars to introduce the notion of the EC as a response to the perceived condition of ‘ecological catastrophism’ that would threaten both China and the globe, unless new, less anthropocentric value systems and world-representations may be constructed to provide for a more efficient critique and reflection upon the techno-industrial modernity (Marinelli 2018). The resultant intellectual debate on the nature and the scope of the EC remained a bit limited in the first years since Ye’s presentation of the concept and until the first tentative mention of the notion in the mid-2000s official documents of the CCP (Marinelli 2018; Goron 2018). The focus within the debate was placed largely on the ethical dimension of the notion of the EC, as well as the latter’s relatedness to the Western scholars’ notion of the Anthropocene as a new stage in the global civilisation’s development being marked by the humankind’s transformation into a primary force shaping the state of the environment (Marinelli 2018; Wen et al. 2012). At the same time, the notion of the EC has been gradually coupled with the concept of ‘Beautiful China’ (having been introduced in the mid-2010s; Jassanoff 2015), thereby pointing out toward the potential for a ‘more perfect’ future for the Chinese society and environment (Kuhn 2019). In that sense, the notion of the EC may be considered to be associated with Chinese intellectuals’ intention to work out a new vision for the country’s future as based on a growing understanding of the inherent limitations of the previous, exclusively economic growth-based development model, as well as of the need to tackle the perceived proliferation of the environmental / ecological crisis in China (Geall and Ely 2018; Marinelli 2018; Hanson 2019; Kuhn 2019).

Furthermore, it is worth noting that the concept of the EC as having been developed by the mid-2000s would be closely aligned with a wider range of future-oriented social and political thinking, as displayed in it being appropriated and further brandished by Pan Yue, one of the leading figures of the Chinese ‘New Left’ of the period in question (Gare 2012). Holding the position of the director of the State Environmental Protection Agency, which was then a vice-ministerial rank, Pan Yue contributed much to popularising the idea of the EC in the environmental policy discourse, via both relating it back to the traditional Chinese notions of harmony between the man and the environment (associated with Taoism; Kuhn 2019) and introducing it in specialised policy documents, such as a 2003 reforestation-related policy guidance (Huang 2014). The 2004 Report on Environment and Development in China (*CEDR Zhongguo huanjing yu fazhan pinglun*) likewise contained some of the major claims associated with the EC-based environmental and socio-economic governance thinking, by directly criticising the perceived ‘cult of GDP’ and suggesting the need for a more comprehensive and environment-friendly perspective on the targets for the country’s development (see Shen 2011). The future Chinese President Xi Jinping would likewise seize upon the discourse of the EC in the mid-2000s, while being the Zhejiang Province Party Secretary (Kuhn 2019; Geall and Ely 2018). Thus, at that time, the notion of the EC as a new mode of social and political thinking embracing the importance of a more sustainable and harmonious relationship between the Chinese society and its environment and with further focus on preventing future environmental catastrophes would appear to have attained a substantive popularity among the Chinese elites.

## ***2.2. The politicisation and state-level adaptation of the concept of Chinese Ecological Civilisation in the 2010s***

As already noted, it was Pan Yue who had contributed to the popularity of the concept of the EC in the circles of the CCP’s policymakers by virtue of his personal activism as the head of China’s principal environmental policy agency (Huang 2014; Kuhn 2019). However, the official recognition and effective inauguration of the EC as one of the key pillars of China’s environmental policy and then state governance at large would not happen until 2007, with the then-President of the People’s Republic of China Hu Jintao introducing the concept during his speech on the main directions of the state and the society’s future development at the 17<sup>th</sup> Party Congress of the CCP. There, the President announced that the “construction of an ecological civilization will be given a prominent place and included in all aspects and processes in economic, political, cultural and social development” (cited in Meng 2012). The focus that has thus been placed on the development of the EC as one of the key goals of national development of China proved to be the onset of a relatively rapid integration of the idea of the EC into the policy thinking and practice of the contemporary People’s Republic of China.

The official explanation of the need for the respective conceptual change in the environmental policy and governance thinking has been succinctly presented in the editorial published by *China Daily*, the CCP’s official English-language publishing outlet, in October 2007. There the notion of the EC was explained as “not a term the Party has coined just to fill a theoretical vacancy in its socialism with Chinese characteristics, but rather a future-oriented guiding principle based on the perception of the extremely high price we have paid for our economic miracle” (*China Daily* 2007). Thus the incorporation of the

EC into the Party's baseline ideology of 'socialism with Chinese characteristics' was directly attributed to the need to reflect upon negative environmental repercussions for the rapid and intense unfolding of China's economic development since the 1980s (Geall and Ely 2018).

Nevertheless, the EC-based policy narrative would attain its present-day significance only from 2012 on, with the 18<sup>th</sup> Congress of the CCP featuring a separate section devoted to implementing the target goals associated with the EC as section 8 of President Hu Jintao's final report to the Congress (Hu 2012). Throughout the report itself, the term 'ecological civilization' was repeated for more than 20 times (Marinelli 2018). The key aspects of the new policy turn (dubbed as 'Making Great Efforts to Advance Ecological Civilization'; Marinelli 2018) were further underscored by the enshrining of the goal of achieving the state of ecological civilisation in the text of the Constitution of the People's Republic of China in the same year (Geall and Ely 2018). In that sense, it can be assumed that the Hu Jintao era of the political development of China prepared the foundations for further emphasis on the EC in terms of political thinking and policy activities in China.

The coming to power of Xi Jinping and his generation of Chinese political leadership is widely attributed in the extant literature as being the key turnaround point for further rise in relevance of the notion of Chinese ecological civilisation <sup>[4]</sup>(Kuhn 2019; Marinelli 2018; Geall and Ely 2018). The concomitant notion of 'Beautiful China' as an ideal-type image of a China transformed due to adherence to the goals of ecological civilisation has likewise been viewed as reflecting the relevance of the non-economic aspects of development to the Xi Jinping administration <sup>[5]</sup>(Pan 2018; Qu 2021; Gao 2021; Ren 2021). According to Geall and Ely (2018) and Kuhn (2019), the notion of 'clear waters and green mountains' has underpinned Xi Jinping and Premier Li Keqiang's increased emphasis on the need for policies aiming at enhancing air, water and soil quality, as well on the relevance of sustainability measures and pollution reduction / energy efficiency increase as overall goals for China's new development strategy). Marinelli (2018) underscores that both the 12<sup>th</sup> (2011-2015) and the 13<sup>th</sup> (2016-2020) Five-Year Plans (FYPs) – the planning guidelines underlying China's development targets within each quinquennial period to be considered – have featured heavy emphasis on the goals associated with the EC discourse, such as building 'comprehensive' capacity for 'sustainable development' in the 12<sup>th</sup> FYP (Central Committee of the Communist Party of China 2011) or the introduction of the 'green is gold' development policy in the 13<sup>th</sup> FYP. In regard of the latter, the Plan would for the first time define the EC as "the management of the relationship between humans and nature in a comprehensive, scientific and systemic manner" (UNEP 2016, 54), both reflecting the tradition of socialist thinking about 'scientific' forms of attaining 'harmony' between the humankind and the environment and stressing the importance of China's contribution to the 2030 United Nations SDGs (Sustainable Development Goals; Marinelli 2018). In that context, the author infers that the growing emphasis on the EC is likely to reflect the Chinese leadership's awareness of the interconnectedness between its efforts to reach the stage of 'Beautiful China' on the one hand and the SDGs-informed international environmental governance initiatives on the other.

In the article by Hanson (2019), some of the more specific aspects of implementing the principles of the EC at the practical policymaking and governance levels in contemporary China may be deduced. The author introduces major priorities for the construction of the EC as pursued in the recent policy reports and documents, such as (1) "spatial planning and development"; (2) "technological innovation and structural adjustment"; (3) "land, water and other natural resource sustainable uses"; or (4) "ecological and environmental protection" (Hanson 2019, 6). Furthermore, the author emphasises that the transformation of China as a result of applying the EC-based approach is envisaged to take place not only on the socio-economic and/or technological level, but also on those of culture and politics, presupposing the need for a range of both local and national innovations in those fields. The focus on public participation and low-carbon / low-pollution urban environments has likewise been noted in the study by Geall and Ely (2018), with the authors stipulating that developing new industries and refurbishing the extant ones in accordance with the target goal of transitioning to a low-carbon 'new normal' may be the EC's major pragmatic content, the ideological rhetoric notwithstanding. Overall, thus, the existing body of scholarship may enable one to note that the elevation of the concept of the EC to one of the key guiding principles in China's 'green is gold' development has been coupled with a relatively loose relationship between the political rhetoric and the effective practice accompanying it.

### **2.3. Research gap**

Proceeding from the aforementioned, one may suggest that one of the key drawbacks of the previously presented literature on the role played by the EC as a policy principle in the contemporary China has been that of limiting the scope of discussion to general political declarations issued by the top leadership of China in connection with specific political events (such as CCP Congresses), whereby the

core emphasis would be placed on the aspects of political discourse / rhetoric, as opposed to evaluating specific measures being taken in their aftermath. While such a direction of research may be fruitful in respect of analysing the importance of the EC as a principle underlying the political rhetoric of contemporary China, it would scarcely allow one to develop an understanding of the particularities of implementing the regulatory impact of the EC upon China's environmental and social development governance. With this in mind, the present research seeks to overcome that omission by underscoring the relevance of the EC and its conceptual components on the example of specific policies and regulations, while paying due attention to their possible omissions and internal contradictions.

### **3. Methodology**

#### **3.1. Research design**

Based on the considerations presented in the chapters above, the research design of this dissertation has been based on the premises of qualitative social research (Bryman 2016) as applied to the field of political analysis. The present research seeks to investigate tangible patterns in terms of applying the concept of the Chinese Ecological Civilisation to both policy-making and political rhetoric of the Chinese government and state in the recent era, with the emphasis being placed on the need to consider the degree of coherence between rhetoric and reality. With this in mind, the study followed a case study-based research design<sup>[6]</sup> (see Crasnow 2012, for a discussion of the applicability of the case study approach in the field of political science), which entails a use of a multi-method approach to cases under consideration. In this respect, a case to be studied has been that of the Chinese government and its regulatory activities in the context of assessing the degree to which their specific policies and regulatory activities may have been governed by the considerations arising from the notion of Chinese Ecological Civilisation.

#### **3.2. Data collection**

The process of data collection for this study has been based on direct engagement of the researcher with secondary data, including (1) documents published by the respective Chinese governmental authorities and their affiliated agencies, (2) documents published by non-Chinese official and/or academic sources on the basis of publicly available information about Chinese policymaking and governance, and (3) third-party sources and materials published by international media outlets on the subject of Chinese Ecological Civilisation and its implementation in the extant policies of the PRC. It should be noted that the materials collected from these three groups of sources have not been specifically differentiated and juxtaposed against each other in the course of the presentation of this research. Rather, the research findings would be presented in an integral manner, thus reflecting the researcher's focus on convergence between the available data sources, so as to provide a holistic account of the research problem. The data collected in this context present direct response to RQ2 and RQ3 as presented in the relevant section of Chapter 1, while RQ1 will be answered indirectly, with further reference to the sources presented in the literature review in Chapter 2. Thus a due consideration for the interrelationship between the respective sources' categories will be given here.

#### **3.3. Data analysis**

In the course of this study, the process of data analysis has been based on the theoretical model of process tracing as implemented in the course of case study-based political research (Crasnow 2012). The notion of process tracing refers to examination of so-called causal process observations (CPOs) – i.e., “pieces of data that provide information about context, process, or mechanism” of specific causal connections between observed phenomena in politics – in their temporal and spatial context (Brady and Collier 2010, p. 183). In the course of this study, the respective CPOs include data on changes in salient Chinese governmental policies as concerns both socio-economic and environmental governance in the course of the recent decade that would be in line with the tenets of Chinese Ecological Civilisation as presented in this study's literature review. Thus the analysis of the respective changes in terms of the Chinese government's policies and regulations will have provided for an overarching perspective on the degree to which principles and tenets of Chinese Ecological Civilisation may have been integrated in the policies under consideration.

## 4. Results and Findings

### 4.1. Overview

This chapter presents an analysis of the findings obtained in the course of applying the methodological framework for data collection and analysis as based on the policies and regulations issued by the Chinese government in the course of the 2010s in the fields of socio-economic and environmental governance. The sections of this chapter are thus arranged on the basis of those fields, with relevant sub-sections having been introduced where appropriate. In that sense, the following analysis seeks to trace tangible evidence of changes in respective policy / governance priorities as coinciding with greater emphasis on the concept of Chinese Ecological Civilisation in terms of political rhetoric.

### 4.2. Socio-economic governance

#### 4.2.1. Economic development planning

*Table 1: Environment-related target goals of the 13th Five-Year Plan (2016-2020). Source: Adopted from Compilation and Translation Bureau (2015).*

Category	Target area	Objective (for 2020)
Energy mix	Proportion of non-fossil energy consumption	15%
Energy efficiency	Proportion of coal in energy consumption	-6%
Climate change action	Decrease in energy consumption per unit of GDP	-15%
	Decrease in carbon emissions per unit of GDP	-18%
Water protection	Chemical oxygen demand	-10%
	Surface water of category III or lower, %	> 70 %
	Category V surface water, %	< 5 %
	Groundwater in the "very bad" category, %	circa 15%
Air protection	CO <sub>2</sub> emissions	-15%
	Noxious gases emissions	-15%
Soil protection	Polluted arable land that is safe to use, %	circa 90%
	Polluted land that is safe to use, %	> 90 %
Forest management	Forest cover	23.04% (realization of the previous plan: 21.63%)

Given that the PRC is a state applying a comprehensive framework of economic planning to provide for its socio-economic development targets, it will be first necessary to trace the possible impact of the concept of Chinese Ecological Civilisation as far as targets, objectives and priorities for economic planning are concerned. It must be noted that it was not until 2006, as part of the 11th Five-Year Plan (2006-2010), that several quantitative environmental and energy targets became imperative, and their non-achievement is supposed to be taken into account. In fact, the environmental objectives of the following plans have been achieved. The 11th and 12th Plans (2006-2010 and 2011-2015) thus led to reductions of around 15 to 20% in energy intensity and carbon intensity over each 5-year interval, and to comparable reductions in crucial greenhouse gas emissions (Asian Development Bank 2011). Given that the notion of Chinese Ecological Civilisation would rise in prominence during this period under consideration, as presented in section 2.2 of this dissertation, a certain degree of association may be

traced here. The 13th Plan (2016-2020) was presented as that of a "new era" according to the official line. It counted "green development" among its five pillars, the other four being innovation, openness, coordination, and inclusive development. The quantified objectives were in fact a continuation of previous plans and consistent with the commitments made under the Paris Agreement. The Plan aimed for a 15% reduction in energy consumption per unit of GDP by 2020 and an 18% reduction in carbon intensity compared to 2015 (Compilation and Translation Bureau 2015). The 13th Energy Plan specified that the implementation of these objectives would involve capping total energy consumption at 5 billion tonnes of coal equivalent by the year 2020 (compared to 4 billion in 2016). And above all, it set for the first time a mandatory objective of reducing the share of coal in total energy consumption, aiming for a figure of 58% in 2020, against 64% in 2015 (Compilation and Translation Bureau 2015). Knowing that coal has always counted for at least two-thirds in China's energy structure, the 58% figure would mark a noticeable change. To achieve this goal, the Plan would rely on an increase of the share of non-fossil fuels and natural gas, which should have reached 15% and 10% respectively by 2020 (Compilation and Translation Bureau 2015). Other key environment-related targets of the 13th Five-Year Plan as relevant to the subject of their impact on socio-economic development of China are further presented in Table 1 below.

As one may see, the provisions of the 13<sup>th</sup> Five-Year Plan for China have included a comprehensive range of target areas associated with socio-economic governance (such as energy mix and energy efficiency) that would be simultaneously integrated with the attendant environmental indicators (such as those of climate change action, which would once again be connected to changes in the relationship between GDP composition and energy consumption / carbon emissions). The focus thus placed on the attainment of the relevant socio-economic goals would simultaneously be combined with an emphasis on the associated environmental indicators. Thus, while not going so far as to renounce the 'cult of GDP' as affirmed by advocates of the philosophy of Chinese Ecological Civilisation <sup>[7]</sup>(Shen 2011), the 13th Plan would nevertheless make major steps toward re-defining the understanding of the relationship between socio-economic and environmental target areas of socio-economic governance.

As far as continuing the aforementioned tendency is considered, the 14th Five-Year Plan currently being implemented has arguably featured a more extensive and intense focus on combining socio-economic and environmental targets within the scope of the country's socio-economic development planning. It is significant from the perspective of the present research that the Plan's overarching framework contains a section dealing with "the new progress of ecological civilisation", which has thus been elevated to the position of one of 6 core socio-economic development target areas for the state-level economic planning (the others being (1) "acquiring new results of economic development", (2) "taking a new step in reform and opening up", (3) "new improvements of social civilization level", (4) "new civilization and welfare", and (5) "new improvements in the efficiency of national governance"; see Center for Security and Emerging Technology 2021, for the full translation of the Plan's Outline into English). Of a more immediate socio-economic governance-related concern would be the Plan's innovative emphasis on low-carbon economic development as the key part of future long-term prospects for the development of Chinese economy and society by 2035<sup>[8]</sup> (Center for Security and Emerging Technology 2021). References to such concepts and policy designs as "low-carbon cities" (2021, 67), "low-carbon energy systems" (2021, 29), or "low-carbon, safe, and efficient use of energy" and "the low-carbon transformation of industry, construction, and transportation" (2021, 94) thus indicate the degree to which the Chinese government has incorporated concerns related to climate change and pollution reduction into long-term assumptions of its socio-economic development policy thinking.

Thus the notion of carbon neutrality effectively underpins the energy strategy of China as presented in the 14th Five-Year Plan. To reduce emissions and achieve carbon neutrality, the PRC plans to introduce a national emissions trading system (ETS). The discussion of this issue has been going on since 2017 and the launch of the system is constantly postponed (according to the latest data, it is scheduled for mid-2021). Initially, ETS will only work with companies in the energy sector (primarily coal and gas power plants), but in the future, emissions trading will expand to seven other sectors, becoming the world's largest trading system, covering one-seventh of the global CO<sub>2</sub> emissions from fossil burning. fuel. Renewable energy development can be funded through IPOs, green bonds, green trusts, and dedicated carbon neutral funds. Outlining the long-term outlook for 2035, the new five-year plan echoes the political promise made by Xi Jinping in December 2020 that "CO<sub>2</sub> emissions will steadily decline after the peak"<sup>[9]</sup> (Xi 2020). The Chinese head of state used exactly the same words when describing China's goal of achieving carbon neutrality by 2060 during his speech at the Climate Ambition Summit in 2020 (Xi 2020). In that sense, the focus placed on energy efficiency in the context of the currently implemented Five-Year Plan demonstrates the relevance of the respective tenets of Chinese Ecological Civilisation for the purposes of guiding China's socioeconomic development.

#### **4.2.2. Energy policy**

Given the importance of the energy sector for China's socio-economic development, possible impact of Chinese Ecological Civilisation on energy governance in China must be considered here as well. In 2012, the PRC State Council Information Bureau published a white paper on China's Energy Policy<sup>[10]</sup>(Information Office of the State Council 2012). This document outlines the main goals and priorities of China's energy strategy. The main points of the program are as follows:

- Creating an energy-saving consumption model.
- Reducing dependence on external sources of income. For this purpose, it is necessary to improve the system of reserve stocks of raw materials, to raise the level of the country's energy security.
- Increasing the share of low-carbon and non-fossil energy resources in the total energy balance of the country. Introduction of technologies for highly efficient use of coal to optimize the structure of energy production and consumption.
- Developing and using energy resources taking into account environmental protection.
- Strengthening the advanced research base in the energy sector.
- Deepening market reforms in order to stimulate progressive development in the energy sector.
- Expanding spheres and directions of international cooperation, promotion of the policy of "going abroad".
- Developing local energy resources through creating new energy infrastructure and basic services (Information Office of the State Council 2012). Thus the development of the respective low-carbon and non-fossil energy resources had been prioritised by China's start policymakers rather early on in the decade of the 2010s, hence articulating the influence of the policy thinking of Chinese Ecological Civilisation on their activities.

As of the end of 2020, the total installed capacity of electricity generation from renewable sources in the PRC reached 930 GW, which is 42.4% of the total installed capacity of the Chinese energy generation system <sup>[11]</sup>(Nenguanjie.net 2021). Within the framework of the 14th Five-Year Plan, great attention is paid to green energy issues, which is due to the general course towards increasing the importance of environmental problems in the PRC and the need to form a strategy for the sustainable development of the country's economy, taking into account environmental protection. In addition, as noted by Pan Xiaogang, deputy general director of the State Grid Corporation of China, developing green energy alternatives can effectively reduce dependence on oil and gas and help ensure a national energy security strategy (Information Office of the State Council 2020). Here one may see how conceptual aspects of developing a low-carbon economy / society would be aligned with more short-term / pragmatic considerations of the nation's energy policy.

In the "Circular on the development of renewable energy sources in the framework of the 14th Five-Year Plan," the energy bureaus of all provinces of the PRC, as well as a number of major stakeholders in energy use (the Xinjiang Construction and Construction Complex, the State Electric Grid Corporation of China, etc.) announced the need for the development of innovative technologies in the field of green energy, allowing to reduce costs and expand the scale of production, which can help lay the foundation for achieving the main goal - bringing the share of non-fossil resources in the total energy consumption of the PRC to 20% by 2030<sup>[12]</sup>(Information Office of the State Council 2020). That is why the priority accorded to sustainable energy development in the recent policy documents of the PRC is likely to reflect the influence of the respective aspects of Chinese Ecological Civilisation, with its emphasis on the combination of the targets of pollution reduction and greater energy sustainability having both environmental and socio-economic aspects in mind.

#### **4.3. Environmental governance**

##### **4.3.1. Administrative system innovations**

The Chinese administrative system in charge of environmental governance has thus undergone six major reforms. Since the establishment for the first time of a pilot group for environmental protection within the State Council in October 1974, national institutions have evolved considerably. This first group became the State Environmental Protection Agency in 1984, then an independent administration (with quasi-ministerial status) in July 1988, the National Environment Administration of the People's Republic of China (Ministry in its own right) in 1998, the Ministry of Environmental Protection in March 2008,



and finally the Ministry of Ecology and Environment of the People's Republic of China (MEE) in March 2018 <sup>[13]</sup>(Wang 2018; Xie 2020). The introduction of the latter as a body with overarching powers over national environmental governance would coincide with the enshrinement of the notion of Chinese Ecological Civilisation in the PRC Constitution, hence underscoring the influence of a notion of environmental issues as having a holistic impact on Chinese society in the context of the new administrative thinking (Marinelli 2018).

In the Institutional Reform Plan of the Council of State submitted to the first session of the 13th National People's Congress on March 13, 2018, the Council of State clearly proposed to integrate the environmental competences previously vested in various institutions within a central management administration – that is, the MEE (Wang 2018). The status of the administrations responsible for environmental protection would thus gradually move from decentralized, multisectoral management to unified and centralized management. According to this reform, the Ministry of Ecology and Environment has the following responsibilities, previously assigned to various bodies:

- Fighting against climate change and for the reduction of emissions of the main pollutants.
- Supervising the prevention and control of groundwater pollution.
- Establishing and implementing the eco-functional regionalization plan for water, management of wastewater outlets and environmental protection of hydrographic basins.
- Supervising and managing pollution from non-point sources in rural areas.
- Protecting the marine environment.
- Supervising environmental protection within development projects at the cross-regional level (Wang 2018; Xie 2020).

The creation of this Ministry of Ecology and Environment should be further placed in the context of a recent Environmental Protection Law of the PRC, which has radically changed Chinese policymakers' perspective on the environment's protection (2015). In the context of this law, the environment refers to all the factors that affect the survival and development of humankind, whether natural or artificially modified, in particular the atmosphere, water, ocean, land, minerals, forests, grasslands, wildlife, natural monuments, cultural monuments, scenic spots, nature reserves, cities and countryside, etc. (Environmental Protection Law 2015). In contrast, "ecological environment" refers to the set of environmental elements such as the atmosphere, surface water, groundwater, soil, forest, and biological elements such as plants, animals and microorganisms. It can be seen that the concept of "environment" is broader than that of "ecological environment"<sup>[14]</sup> (Environmental Protection Law 2015). As a result, the MEE's scope of responsibilities is widened, in line with the objective of building the Chinese Ecological Civilisation as per the updated PRC Constitution.

In order to remedy the fragmentation of environmental policies and legislation and to avoid inconsistencies and contradictions between environmental policies issued by different ministries, the creation of the MEE makes it possible to undertake the overall planning of future environmental policies and legislation, and thus to harmonize and unify environmental policies and legislation in China. Several pieces of legislation, such as the Law on Combating Climate Change, the National Regulation on the Administration of Carbon Emissions Trading and Measures on the Administration of Carbon Quotas for New Energy Vehicles are currently being drafted in China, with a view to harmonizing the functions of the National Development and Reform Commission (NDRC) and the MEE in the fight against climate change and the reduction of emissions of the main pollutants (Wang 2018). The current documents of the Water Law and the Law on the Prevention and Control of Water Pollution, enacting the measures for the supervision and control of the flow of wastewater in rivers, as well as the protocol techniques for monitoring maritime areas close to sewers, previously provided by three administrations, will have to be harmonized.

The concentration of responsibilities in a single administration allows the MEE to deploy and exercise supervisory and environmental management powers in a unified manner. This unification has the advantage of better controlling the behaviour of companies regarding the reduction of carbon dioxide emissions and the trading of carbon emission rights. With regard to water, the MEE will have to develop and improve plans for the ecofunctional regionalization of water, harden the conditions for discharging wastewater into rivers, intensify efforts for the protection of hydrographic basins, and in general fight against water pollution. In addition, the MEE will strengthen the control of water withdrawal permits in the south-north water diversion project and the environmental protection management of the project area. Greater attention will be paid to the remediation and environmental protection of soil and groundwater

in the process of selecting sites for construction, operation and relocation of companies. With the creation of the MEE, the field of competence of the Chinese environmental administration will be extended and the "five links" will be realized, namely: connecting the top and the bottom of the earth; connecting the shore and the water; connecting the land and the sea; link urban and rural areas and linking carbon monoxide and carbon dioxide pollution prevention<sup>[15]</sup> (Dong 2020). The dissemination of environmental information and the call for public participation, put in place by the previous Ministry of Environmental Protection, will be continued in the direction of greater openness and transparency. In so doing, the task of contributing to a more comprehensive mechanism for developing Chinese Ecological Civilisation will have been addressed in a more concentrated manner.

#### **4.3.2. Pollution prevention and control**

Since 2015, the pressure has clearly increased on polluters. China's new environmental protection law, which entered into force in January 2015, has strengthened the powers of the administration in charge of environmental protection to change behaviour, and it has also strengthened the role of the public opinion. The main advances relate to (1) the increase in penalties for non-compliance with environmental rules, (2) the increased accountability of local authorities in the implementation of environmental policies and (3) the strengthening of the role of civil society, allowing NGOs to take legal action against polluters in the name of the public interest.

The new law thus directly addresses two of the main causes of the failure to enforce existing standards: lack of accountability and weak oversight. Until then, local authorities had little incentive to apply environmental standards that conflicted with their logic of economic growth at all costs, and they were especially little forced to do so given the low capacity of influence of the population, however. first witness and first victim of pollution. In 2015 and 2016, around 100 cases were brought to court by NGOs, which does not seem to reflect the scale of existing violations. This low figure is mainly due to the interference of local authorities in the judicial system, which makes the courts reluctant to agree to rule on such cases.

Another factor effectively limiting the effectiveness of the pollution control measures adopted is the weakness of the penalties incurred in the event of a violation. Until now, fines, when imposed, have been too low to be a deterrent, and companies have preferred to pay them rather than costly bring their production equipment into compliance. The new laws (Air Pollution Law of 2016; Tax Law on the Protection of the Environment of 2018 and the Law on the Prevention and Reduction of Water Pollution, which entered into force on January 1, 2018) authorize, in the event of an infringement not only the application of cumulative daily fines without a ceiling but also the seizure of polluting equipment and / or installations, in addition to limiting or stopping production in the event of excessive pollution. Another advance: the possibility of placing polluters in administrative detention and, for the most serious offenses, of sending them to prison. The system should also apply to small and medium-sized private companies hitherto largely untouched.

The most notable change implied by the law which entered into force at the beginning of 2018 is the replacement of the system of charges applied at the local level by a national tax system making taxes on all atmospheric and aquatic pollutants, on the quantities of solid waste. products and noise. While the collection of fees had until then been carried out by the local representations of the environmental protection authority (which were also in charge of monitoring), themselves partly subordinated to the local economic and political authorities, the collection taxes will henceforth be carried out by the tax authorities. This change is supposed to put an end to the influence of local authorities, whose interests often overlap with those of polluting companies. An experiment is also underway to restructure the environmental protection offices responsible for environmental monitoring at the local level, so that they report directly to the provincial departments of environmental protection rather than local governments. While it is still too early to measure the effectiveness of the reform, it is necessary to underline the additional cost that it could cause for companies: the new rates would considerably increase the amounts paid by large public companies in the chemical and energy sectors - from 40 to 300% according to analysts<sup>[16]</sup>(South China Morning Post 2019). In that sense, the development of the effective approach toward implementing the principle of Chinese Ecological Civilisation in terms of anti-pollution legislation of China in the late 2010s would coincide with the elevation of the respective principle in terms of overall governmental rhetoric, hence displaying a robust fit between the former and the latter.

#### **4.3.3. Rural and urban revitalisation policies**

Last but not least, the advancement of the concepts of Chinese Ecological Civilisation and 'Beautiful China' would apparently give rise to the notion of rural and urban revitalisation as integral part of providing for higher quality of both urban and rural habitats, while providing for a sustainability of

regional development and a gradual blurring of the development gap between the city and the countryside (Scott-Bell 2021). This policy direction has been directly connected to the overall agenda of Chinese Ecological Civilisation. Thus, in September 2015, the CPC Central Committee and the State Council of the People's Republic of China issued a General Plan for Reforming the System of China's Ecological Civilization, according to which regional development should correspond to 5 areas, i.e., innovation, coordination, environmental friendliness, openness, and the joint use of natural resources by all Chinese macro-regions<sup>[17]</sup> (Liu 2019). At the 19th CPC Congress (October 2017), it was emphasized that fresh air, clean water, fertile land, and biodiversity all need to be preserved for future generations (Liu 2019; Liu and Deng 2019). Particular attention was paid to protecting the natural ecology of forests, meadows, rivers, lakes, wetlands, and oceans, hence indicating a comprehensive approach toward the environment as already mentioned above<sup>[18]</sup> (Liu and Deng 2019). Within the framework of these plans, it was planned to define a system of property rights to natural resources, develop a system for protecting territorial space, territorial planning, defining an integrated resource management and an integrated environmental protection system, as well as an environmental management system. The implementation of the strategy for the development of the "green economy" in the PRC was closely related to the formation of an ecological culture, the promotion of the conservation of resources and their efficient use, the popularization of a "green" lifestyle and the maintenance of environmental safety, the coordinated development of the eastern, central, north-eastern and western regions of China.

The desire to build an ecological civilization was reflected in the policy of the Chinese government to develop large agglomerations. In the 2010s, a project of eco-cities in the PRC was developed. Currently, it is planned to build 285 innovative and technological cities throughout China; a project for greening skyscrapers to absorb carbon dioxide and smog is being actively implemented (Liu and Deng 2019). The construction of "smart", "low-carbon", "green cities" implies in the future to solve many environmental problems in the development of the urbanization process. In recent years, within the framework of the implementation of the projects of the Strategy for the Coordinated Regional Development of the Territory of China and the fulfilment of the tasks of the General Plan for Reforming the System of Ecological Civilization of China, a course for the integrated development of cities and rural areas of the PRC was determined (Liu 2019). The idea of building innovative urban areas, taking into account the load on resources and the environment, is spreading as multiple revitalisation projects are being developed to adjust the scale of cities, optimize the forms and functions of urban spaces, introduce standards for environmental planning, design and construction of small, medium and large cities in China. The government aims to make large cities "smarter" through the use of big data technologies, artificial intelligence technologies in urban planning, construction and administration.

At the same time, there is evidence concerning a fairly imbalanced course of implementing the respective approach to rural and urban revitalisation at the regional level. Thus, measuring green development indicators for 2013-2017 in cities in China showed that Shenzhen, Guangzhou, Wuxi, Hangzhou, Qingdao, and other cities show higher rates of green development. They are mainly located in the Yangtze and Pearl River Delta and in the eastern coastal regions of China. Likewise, the Shandong, the Jiangsu and the Guangdong provinces have the highest rates of green urban development, and in effect, most of the "green" settlements are located in the Inner Mongolia Autonomous Region and the Qinghai province. Along with the leading regions in "green" development in China, there are regions with relatively low indicators of "green" development, which are mainly located in Central China, some areas of Heilongjiang, as well as the Gansu and the Shaanxi provinces. On the one hand, there is a low level of greening of the natural environment (the Gansu and the Shaanxi provinces), on the other, some industrialized cities (the Heilongjiang province) have suffered serious environmental damage in the process of regional development. Hence redressing the aforementioned problems would be essential for the purposes of developing the paradigm of Chinese Ecological Civilisation.

#### **4.4. Summary**

Based on the aforementioned, it may be inferred that Chinese Ecological Civilisation has likely had its conceptual influence on a wide range of policies and areas of governance, both socio-economic and environmental ones, in contemporary China. Therefore, the influence of the aforementioned philosophy of social development has been significant enough to warrant considering its constitutive role in respect of such areas as economic planning, energy policy, environmental governance as such, pollution prevention and control, and regional development policies as related to the concept of rural and urban revitalisation. Hence overall assessment of the role of Chinese Ecological Civilisation from the governance perspective should take account of all the aforementioned dimensions thereof.

## 5. Conclusions

Based on the analysis in the previous chapters, the following conclusions can be presented for this thesis.

1) The Chinese Ecological Civilisation has become a form of philosophy of social development with a particular focus on a perceived harmony between human beings and their environment that would turn out to become a particularly influential in the context of the 2010s revamping of the PRC's socio-economic and environmental development priorities, as it provided for a greater focus on overall sustainability and mitigation / alleviation of perceived negative impacts of China's economic development spurt in the previous decades of the PRC's history. Accordingly, the implementation of such tenets of the Chinese Ecological Civilisation as emphasis on human-nature harmony, sustainability, and a holistic view of development as closely related to environmental protection has found its expression in the respective policies and regulations of Chinese authorities in the 2010s, with the period of the Xi Jinping administration being particularly prolific in that regard.

2) The results of the study demonstrated that a wide range of policy measures and directions in the key fields of socio-economic and environmental governance may have been by the narrative of constructing Chinese Ecological Civilisation – both explicitly and implicitly. The outcomes of this influence have overall worked to provide for a closer integration between the socio-economic development-oriented and environmental protection-oriented forms of policy thinking – as manifested specifically in China's recent Five-Year Plans. In that sense, the development of the respective policies has been enabled by the growing relevance of Chinese Ecological Civilisation as both a philosophy and a conceptual framework for governance. In that sense, the importance of the aforementioned policy directions to the areas of governance in question may scarcely be underestimated.

3) Finally, the policies analysed in the context of this study have all demonstrated a relatively high degree of convergence with the tenets of Chinese Ecological Civilisation even as they may have incorporated other concerns (e.g., those of energy efficiency, rural-urban divide mitigation, or increasing polluters' liability). In that sense, the pragmatic side of the respective policies has still been in convergence with the one enabled by the philosophical aspects of Chinese Ecological Civilisation, thereby emphasising their principal alignment with each other.

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