

# **Another Way to Green:**

# China's 'Ecological Civilization' Approach to Environmental Governance

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**Abstract** 

This thesis investigates the practical and conceptual interplay between authoritarian

and green ecological governance within China's Ecological Civilization system, post-

2013. Through a qualitative analysis of official policy documents and semi-structured

interviews, the study explores how China navigates the spectrum between the 'Green

State' and 'Authoritarian Environmentalism'. Findings suggest a predominant

presence of authoritarian environmentalism, especially at lower levels of governance,

while also integrating key elements of green state ideology such as effective

management mechanisms and sustainability principles. The research highlights the

complexities of implementing ecological policies within China's unique political

framework, where centralized control often overshadows public participation and

transparency. This study enriches our understanding of China's approach to ecological

governance and its broader implications for global environmental policy discourse.

*Keywords*:

Authoritarian Environmentalism, Ecological Civilization, Green

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1

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# **Table of Content**

1 Introduc	ction	5
1.1	Research Question	6
2 Backgro	ound—China's Ecological Civilization	7
3 Literatu	re Review	11
4 Theoret	ical Framework	15
4.1	Conceptual Analysis	15
4.2	Green State Theory	16
4.3	Authoritarian Environmentalism	21
5 Methodo	ology	27
5.1.1 I	Evaluative Qualitative Text Analysis	28
5.2.1 I	Semi-Structured Interviews  Data Collection  Data Analysis	32
5.3	Integration of Analysis	35
5.4	Ethical Consideration	35
6 Analysis	7	36
6.1.1 I	Characteristics of China's Ecological Civilization Enforceability	37
	Fransparency	
6.1.5 <i>A</i> 6.1.6 I	Global Engagement	53 58
0.1./ 1	rosidoning of Unina's Ecological Civinzation From Ideal Central Frame	bU

	6.2	The Clean Winter Heating Project in Northern China	61
	6.2.1	Characteristics of Sub-Central Departmental Project	62
	6.2.2	Positioning of China's Ecological Civilization From Project Design	69
		Characteristics of Provincial Policies	
	6.2.4	Positioning of China's Ecological Civilization From Provincial Policy-Making	72
	6.2.5	Characteristics of Policy Implementation	74
	6.3	Conclusion of the Positioning of China's Ecological Civilization	78
7 (	Conclu	ision	81
8 1	Bibliog	raphy	83
		dix	
9 /			89
<b>9</b>	Append	dix	<b>89</b> 89
<b>9</b>	<b>Append</b> 9.1 9.2	Appendix 1: Documents' Titles	<b> 89</b> 89
9 2	<b>Append</b> 9.1 9.2	Appendix 1: Documents' Titles	<b>89</b> 89 al 90

#### 1 Introduction

For decades, political theorists and environmental scholars have debated this very nexus. Democracies, with their inherent emphasis on freedom, transparency, and public participation, are often perceived as systems that should be naturally predisposed to address public goods like environmental quality (Congleton, 1992). Conversely, the eco-authoritarian argument posits that authoritarian regimes, with centralized decision-making processes, might be better positioned to implement swift and stringent environmental measures, bypassing the bureaucratic intricacies and partisan conflicts typical of democracies (Westra, 1998).

Some look to China's recent climate change policies – which involve top-down edicts, limited consultation, and personal liberties restrictions that Westerners would find unacceptable – and conclude that authoritarian China may offer a more viable path to environmental governance, enabling quick and decisive action (Shearman and Smith, 2007; Beeson, 2010; Gilley, 2012). On top of this, most views regard China's environmental governance system as completely authoritarian. However, after scrutinizing China's environmental governance documents, from the state level to the local, China's environmental governance system cannot simply be defined as "authoritarian", but has some aspects that are more like Robyn Eckersley's concepts of Green State, which is interesting to investigate.

This thesis aims to critically analyze the concept and practice of environmental governance blueprint and practices in China post-2013, under the banner of Xi Jinping's "Ecological Civilization." This study is imperative for understanding how China formulates its environmental governance system, and how we should see its interplay between Authoritarian Environmentalism and Green State theory. This investigation is both interesting and necessary because it offers new interpretative

perspectives on China's environmental governance system under authoritarian regimes, allowing us to look at China's environmental governance system beyond traditional perspectives such as democracy or authoritarianism.

## 1.1 Research Question

How does China's Ecological Civilization reflect the interplay between authoritarian and green democratic governance?

This study will especially focus on how China's Ecological Civilization system runs after Xi Jinping came into power. Besides, different from previous research in this area, this study will not only explore from the national level but also look through how local governments react to policies from above, which will provide us with a more comprehensive and multi-level insight into China's Ecological Civilization.

## 2 Background—China's Ecological Civilization

China's rapid economic growth has been overshadowed by escalating environmental crises. The country's largely unregulated industrial boom has resulted in severe air and water pollution, soil degradation, and an expanding ecological footprint. Beijing's infamous smog has become a symbol of these challenges, presenting significant health risks and stoking public concern. The pressure on natural resources, like water scarcity, has further complicated the situation. Once seen as a major obstacle in global climate talks, China was heavily criticized for its role in the collapse of negotiations at the 2009 United Nations summit in Copenhagen (Conrad, 2012). These conditions have jeopardized public health and quality of life while casting doubt on the sustainability of China's economic model.

To tackle these challenges, the Chinese government has adopted a top-down approach to crafting and executing environmental policies. The National Leading Group to Address Climate Change, headed by the Premier, leads this effort by assigning responsibilities down to provincial and local levels. Provincial governments implement central directives and then delegate these instructions to lower-level authorities, overseeing their implementation. Each level of government has established climate change leadership groups, guided by scientific advisory committees, to meet central mandates on reducing emissions intensity and developing climate change mitigation strategies (PRC National Development and Reform Commission (NDRC), 2022).

The Chinese government introduced the concept of Ecological Civilization at the 17th National Congress of the Chinese Communist Party (CCP) in 2007. The aim was to manage the human-nature relationship in a comprehensive, scientific, and systematic way (UNEP, 2016; Chang, 2019). In Chinese, "civilizations" translates to "progress,"

so Ecological Civilization implies progress in ecological governance (China Daily, 2012). When Xi Jinping came to power in 2013, the concept became a significant framework for shaping China's environmental policies and laws. By 2016, it had been incorporated into the 13th Five-Year Plan, and its standing in the Constitution was solidified in 2018 (Hansen, Li, and Svarverud, 2018). Under Xi, Ecological Civilization emerged as a pillar of China's environmental strategy, marking a shift from purely growth-focused policies. Now rooted in the CCP's constitution, this philosophy emphasizes harmony between humanity and nature, weaving environmental preservation into the broader socio-economic development agenda (The State Council of China, 2022).

'Ecological Civilization' is built on several core principles:

<u>Harmony Between Humans and Nature</u>: This principle advocates for respecting, adapting to, and protecting nature, marking a shift from a human-centric to a nature-centric approach. It recognizes the deep connection between human well-being and environmental health (Xi, 2019).

<u>Sustainable Development</u>: Emphasizing the need to meet the needs of the present without compromising future generations' ability to do the same, this principle promotes a balanced approach to economic growth, environmental stewardship, and social equity (Xi, 2019).

<u>Green and Low-Carbon Lifestyle</u>: This encourages lifestyles that reduce environmental impacts through the use of renewable energy, energy conservation, and the reduction of pollution and waste (Xi, 2019).

<u>Ecological Protection and Restoration</u>: Focused on actively protecting and restoring natural ecosystems like forests, rivers, and wetlands, this principle underscores their value not only for biodiversity but also for their role in climate regulation, water purification, and other essential ecological functions (Xi, 2019).

The principles underpinning Ecological Civilization represent a significant shift in China's environmental governance strategy, moving away from anthropocentric exploitation towards a philosophy that places greater emphasis on nature and ecological balance. This shift underscores a comprehensive effort to align China's swift economic expansion with the essential goals of environmental sustainability. The focus on sustainable development, the promotion of a green and low-carbon lifestyle, and the commitment to ecological restoration are indicative of an integrated approach aimed at harmonizing economic progress with the health of the natural world. In line with Eckersley's observations, this transition necessitates a robust and effective state apparatus capable of utilizing regulatory and fiscal instruments to guide the behavior of investors, producers, and consumers toward sustainability. This ensures that the journey towards a more sustainable society also addresses social equity, preventing the environmental agenda from exacerbating existing inequalities (Eckersley, 2004).

In the unique context of China's autocratic governance, crafting a democratic, deliberative model for environmental governance presents significant challenges, potentially threatening the authority and continuity of the Chinese Communist Party (CCP) (Beeson, 2018). Unlike in democratic systems, the CCP secures its legitimacy not through electoral mandates but through a model of 'performance legitimacy' rooted in consultative authoritarianism (Zhu, 2011). This approach, largely devoid of democratic participation, aligns with the historical and cultural-political landscape of China (Lo, 2010). Consequently, this political environment has naturally fostered an authoritarian model of environmental governance in China, which, given the current circumstances, appears to be the most practical approach for addressing China's environmental challenges. This governance style is reflected in China's approach to environmental policy, which is predominantly technocratic and regulatory, often sidelining public engagement. Under such a framework, societal participation is largely limited to the compliance and assimilation of top-down policies. However, the successful implementation of these policies tends to enhance governmental satisfaction, thereby reinforcing the government's authority (Teets, 2013). This dynamic underlines

the complex interplay between governance style and environmental strategy in the context of China's political and cultural fabric.

The exploration of China's Ecological Civilization system reveals that its environmental governance model isn't entirely characterized by authoritarian environmentalism but also incorporates elements of the Green State, a nuance not observed in previous studies of China's ecological governance model. In the next section of the literature review, China's and other East Asian nations' environmental governance models will be analyzed from the perspective of authoritarian environmentalism. This will help us understand the characteristics of authoritarian environmentalism in East Asian environmental governance, particularly in China, while identifying gaps in existing research and highlighting the significance of this study.

#### 3 Literature Review

The following section of the literature review will discuss relevant research on China's environmental governance model and Ecological Civilization system, which includes an interpretation of China's environmental governance model, and the environmental governance models of different East Asian authoritarian countries.

Most scholars believe that China, as an authoritarian state, has a model of environmental governance that also largely conforms to the characteristics of authoritarian environmentalism. As pointed out by Gilley, China clearly falls into the category of an authoritarian regime, so any causal explanation should start by analyzing the existing structures of state domination (Gilley, 2012). The governance model is characterized by the party-state's dominance, imposing top-down directives with little room for dissent or public involvement. Civil society participation is tightly controlled and co-opted to ensure compliance with party guidelines. Teets describes "consultative authoritarianism," where select non-governmental organizations operate within narrowly defined limits (Teets, 2013). Lo highlights that top-down policies involve directives from central to regional and local governments, which are expected to meet centrally set environmental targets (Lo, 2015).

However, local governments often prioritize economic growth over environmental goals, leading to inconsistencies between policy and implementation. Dai and Spires emphasize the state's strategic engagement with non-state actors (Dai and Spires, 2018). Despite recognizing the value of non-state organizations, the government manages its involvement to avoid challenges to state authority. Overall, from most scholars' point of view, China's environmental governance exemplifies authoritarian environmentalism, marked by centralized control, limited civil society participation, and strict adherence to party-state dominance.

There are also researches provide further depth to this understanding by examining the characteristics of authoritarian environmentalism in China's climate change response. Beeson argues that the centralized political structure allows for rapid and decisive policy implementation while bypassing the lengthy processes required in democratic systems (Beeson, 2010). However, this often sacrifices public participation and transparency. Von Stein and Jana warn that centralized control can lead to authoritarian overreach, stifling stakeholder involvement and prioritizing compliance over genuinely effective measures (Von Stein, 2022). Han points out that China's stateled climate change response reflects the political regime's nature, where swift implementation can be an asset but discrepancies between global commitments and local practices sow skepticism about the government's intentions (Han, 2015). These studies highlight the complex balance between efficiency and inclusiveness in China's authoritarian governance model and how centralization both helps and hinders China's climate change response.

The environmental governance models of South Korea, Singapore, and Vietnam serve as representative cases of authoritarian environmentalism in Asia, each reflecting unique historical and socio-political contexts while sharing common characteristics. Han explores this phenomenon in South Korea and Singapore, emphasizing the top-down, non-participatory nature of policy-making and the dominant role of state control in environmental decision-making (Han, 2015, 2017).

Singapore's approach is grounded in its legacy as a developmental state, where technocratic control restricts the participation of non-state actors in environmental policy-making. The government strategically maintains authority over environmental governance through specialized agencies and a highly efficient bureaucracy (Han, 2017). Economic progress and ecological modernization are prioritized, leading to the development of green spaces and infrastructure. However, this utilitarian perspective views nature as a resource to be optimized rather than a domain that requires a

comprehensive transition to a truly green society. Strict regulations ensure that businesses and citizens comply with government standards, but this framework leaves little room for grassroots participation or alternative approaches to environmental management (Han, 2017).

In South Korea, a similar centralized, non-participatory approach defines its environmental governance model. The president and a small group of technocrats maintain tight control over environmental policies (Han, 2015). Power is concentrated in a development-focused ministry, ensuring that rapid industrialization remains the central priority while civil society is systematically suppressed. This legacy of an authoritarian developmental state shapes contemporary governance, where economic development is consistently prioritized over environmental concerns (Han, 2015). The result is a bureaucratic system that lacks flexibility and is often criticized for its limited public input and failure to address local environmental needs.

Bruun investigates Vietnam's environmental governance model, emphasizing the state's dominant role in shaping environmental policies. Vietnam's model is characterized by comprehensive frameworks and initiatives led by the government, aiming to balance economic growth with ecological improvements (Bruun, 2020). However, this highly centralized approach stifles autonomous value changes within society and impedes spontaneous shifts in environmental consciousness. The government retains significant control over environmental actions, prioritizing its development agenda while leaving little space for societal participation (Bruun, 2020). Despite this, the state has achieved some success in leveraging its centralized power to quickly implement ambitious environmental initiatives.

Previous studies implicitly assume that an authoritarian state's environmental governance model must also be authoritarian, without delving into its specific theoretical orientations and composition. To address this gap, the theoretical framework of China's environmental governance model, known as the Ecological

Civilization system, will be thoroughly explored in conjunction with the previous background analysis of China's Ecological Civilization. Developing a theoretical framework that measures China's Ecological Civilization system through an in-depth analysis of Green State and authoritarian environmentalism theories will lay the groundwork for assessing its position within that framework.

#### 4 Theoretical Framework

To assess the position of China's Ecological Civilization, a spectrum from the ideal Green State to a completely Authoritarian Environmentalist state will be formulated. In contrast to the common view, China's Ecological Civilization does not like a completely authoritarian environmentalist system but also includes some elements from concepts of the Green State. This part is going to look through the concepts of Green State and Authoritarian Environmentalism to find benchmarks for identifying how to position China's Ecological Civilization. Adopting a constructivist ontology and interpretivist epistemology, this study contends that environmental policies and practices are socially constructed, and shaped by historical, cultural, and political contexts. Through Conceptual Analysis, we aim to dissect the theoretical underpinnings and practical implementations of Green State and Authoritarian Environmentalism, providing a nuanced understanding of their impacts on China's green policy execution.

#### 4.1 Conceptual Analysis

Conceptual analysis in academic research typically involves breaking down complex ideas into their fundamental components to better understand their meaning and implications. Just as Gilbert Ryle suggests, conceptual analysis isn't just about breaking down concepts but involves comparing different systems of thought or conceptual frameworks (Ryle, 2015). This method aims to examine the underlying assumptions, uses, and dimensions of concepts relevant to the study. Garyfallia also made a supplement to the definition of Conceptual Analysis which is "a precise process of examining parts, operations of and the interrelated whole of a thing" (Forsytb, 1980).

In this way, how theories were constructed and formulated can be well dismantled which helps find similarities and differences among them. In the context of

exploring theories like Green State and Authoritarian Environmentalism, conceptual analysis helps clarify key elements, identify overlaps or contradictions, and assess their relevance to China's Ecological Civilization. This approach aids in establishing a clear, systematic understanding of theoretical frameworks, enhancing the depth and rigor of the research. Specifically, Conceptual Analysis can be a great tool to break down Authoritarian Environmentalism and Green State into specific benchmarks, which can methodically assess and compare these theoretical frameworks against the policies and implementations observed within China's Ecological Civilization system.

## 4.2 Green State Theory

The debate on defining a 'Green State' and the role of green politics in tackling environmental challenges has gained prominence, with green politics advocating for sustainable development that includes securing human rights, reducing socio-economic disparities, and ensuring economic demands do not surpass ecosystems' natural regenerative capacities (Barry, 2008). At the heart of this discussion is Green Republicanism, which merges political engagement with environmental responsibility, promoting a society that collectively supports green initiatives as foundational values for a Green State.

Green Republicanism, drawing on republicanism principles, stresses civil duties, civic participation, and striving for the common good. It supports a political system where individuals are actively involved in maintaining their community's ecological health. Barry describes this political approach as one that constructs a stable community despite unpredictable threats, requiring ongoing collective effort to uphold values like liberty and the common good (Barry, 2008). This model champions active citizenship and collaborative decision-making in environmental governance, encouraging policies that benefit the entire society while conserving natural resources.

Barry also highlights the inherent contradiction between economic development and environmental sustainability, suggesting that green reform is not 'anti-liberal' but 'post-liberal'. This approach separates free market capitalism from liberal democracy, aiming for a post-liberal political, post-capitalist economic, and post-carbon sustainable order (Barry, 2008). Green Republicanism envisions a governance framework that diverges from traditional liberal democracy, advocating for stronger governmental intervention with greener laws, constitutions, and institutions. While radical green theories might propose ending nation-states, Green Republicanism underscores the importance of national states in achieving a green world, arguing that anarchy cannot facilitate such a transformation.

Robyn Eckersley's Green State theory suggests that a Green State should function as a post-liberal state, where regulatory ideals and democratic processes are informed by ecological democracy (Eckersley, 2004). Historically, liberal democratic states emerged from bourgeois movements in the 1700s-1800s, and social democratic states from labor movements in the 1900s. In the current century, the formation of green states hinges on identifying and mobilizing a vanguard, likely represented by the broader green movement (Eckersley, 2004). The transformation into green states, however, is expected to be a prolonged struggle, necessitating the development of a normative green state framework to safeguard environmental progress.

Eckersley's theory emphasizes the need for states to integrate environmental objectives into legislation and institutional frameworks, underlining the role of government mechanisms in advancing ecological goals (Eckersley, 2004). This theory serves as a practical extension of Green Republicanism, applying its values through state action and exploring how state policies can achieve sustainability. Although mainstream green political thought often views the state's role in environmental governance skeptically, Eckersley acknowledges the benefits of state structures in resource distribution, public welfare, and global stability. Despite potential drawbacks

like suppression of public discourse, states are seen as essential for facilitating green transformations. Bull (2019) also supports this view, suggesting that leveraging existing state systems for green reforms is more efficient than overhauling the global order, recognizing the enduring and indispensable role of nation-states in social and political power dynamics.

Robyn Eckersley's pragmatic view on the utility of the state is complemented by an understanding of its dual nature within environmental contexts. Although the state has significant coercive powers, these capabilities are not inherently harmful to ecological goals and can instead be redirected toward enforcing ecological norms and regulations (Eckersley, 2004). The effectiveness of a Green State should thus be judged not by its coercive capacity alone, but by the objectives it pursues, how it exercises its power, and its commitment to public accountability and transparency. This complex interplay offers a new lens to evaluate the state's role in environmental governance.

An exploration of what type of state could emerge from the comprehensive implementation of green movement regulations involves examining the underlying political ideology, nature of public engagement, and envisioned state roles (Eckersley, 2004). This examination extends to how these aspects are integrated into formal green policy frameworks and reflected in the informal political culture of states. Eckersley articulates that environmental expectations placed on state actions are deeply tied to a normative theory of the nation-state's ideal role relative to its society, its geographical domain, the international state community, global civil society, and the global environment (Eckersley, 2004). From this, Eckersley proposes a conceptual 'blueprint' for a Green State, establishing benchmarks around enforceability, interest preferences, and global engagement to define this vision clearly.

#### Benchmarks of a Green State:

### • <u>'Strong' or effective (Enforceability)</u>

The state must utilize regulatory and fiscal mechanisms effectively to ensure that societal and economic activities respect ecosystem integrity, aiming to minimize energy and resource consumption, reduce pollution, and safeguard biodiversity and life-support systems. Furthermore, it is essential for the state to redistribute resources and shape life opportunities to prevent a socially regressive shift towards sustainability, particularly if environmental and social justice goals are not aligned. Given that markets often have limited ability to regulate societal behaviors and usually react only to consumer demands, the state's role becomes crucial as the primary source of political and legal authority in modern, diverse societies (Eckersley, 2004).

#### • <u>'Ethical' and democratically responsible/responsive (Interests Preference)</u>

This implies that the state prioritizes public interests and values over private ones, serving as a vehicle for justice rather than power, or 'right' rather than 'might' (Eckersley, 2004). The notion that the state should be 'good' stems from the belief that it is the most legitimate—and not merely the most powerful—social institution to take on the role of 'public ecological guardian'. In this capacity, the state is expected to regulate and discipline investment, production, and consumption to safeguard genuinely public goods such as life-support services, public amenities, public transport, and biodiversity (Eckersley, 2004).

#### • Cosmopolitan (Global Engagement)

The principle "Think globally, act locally" implies that a green democratic state should serve as a 'good ecological guardian' for its own people and territory and as a responsible member of the international community (Eckersley, 2004). Such a state actively promotes collective action to uphold green values and goals, while taking responsibility—both unilaterally and multilaterally—to prevent the externalization of social and ecological costs beyond its borders and into the future (Eckersley, 2004).

In addition to these benchmarks, Eckersley also brought about a possible charter of citizens' environmental rights and responsibilities, which can be generalized into three factors—transparency, accountability, and legitimacy. Furthermore, the charter can also be seen as a part of the blueprint of an ideal Green State, in other words, this can be a supplement to map out a more complete set of benchmarks for a Green State.

#### • <u>Transparency</u>

This comprehensive approach to transparency seeks to empower individuals and communities, ensuring that environmental governance is conducted in an open, inclusive, and accountable manner. It encompasses the provision of mandatory state reports on environmental conditions, community access to data on pollutants and toxic substances, the right to be informed about risk-generating proposals, and active participation in environmental impact assessments of new developments and technology proposals (Eckersley, 2004). Moreover, it involves the public's involvement in negotiating environmental standards, highlighting the importance of an informed and engaged community in fostering sustainable environmental management (Eckersley, 2004).

#### • <u>Accountability</u>

It encompasses a range of mechanisms designed to ensure that individuals, NGOs, and concerned citizens can actively contribute to the enforcement of public environmental laws and standards. This includes the right to remedies for those who suffer or are threatened by environmental harm, allowing for third-party litigation to uphold environmental laws (Eckersley, 2004). It also places a responsibility on state decision-makers and corporations to adopt a precautionary approach to risk assessment, considering the well-being of future generations and nonhuman species (Eckersley, 2004). Additionally, there's an obligation to compensate for any environmental damage caused to innocent parties, rooted in the principle that the polluter pays

(Eckersley, 2004). Fundamental to these accountability measures is the constitutional establishment of an independent authority, such as an environmental defender's office, tasked with representing public environmental interests legally and politically (Eckersley, 2004).

#### • <u>Legitimacy</u>

It maintains legitimacy by addressing the rights and concerns of all stakeholders, thus fostering international cooperation and environmental stewardship. Provisions for cross-border referenda and reciprocal representation in deliberative forums allow citizens from different states to participate in managing transnational environmental issues (Eckersley, 2004). Effective implementation requires reciprocal agreements between states. Additionally, in federal systems, it is crucial for national or central governments to have clear and assertive legislative powers to protect the environment. Such powers ensure that environmental responsibilities are not deferred to lower governmental levels and facilitate the ratification and execution of international environmental treaties (Eckersley, 2004).

#### 4.3 Authoritarian Environmentalism

As global environmental crises, including climate change and loss of biodiversity, intensify the effectiveness of governance systems in tackling these problems is being critically examined. Environmental degradation also contributes to the reinforcement and emergence of authoritarian rule, with political elites prioritizing the preservation of their regime and ensuring internal stability above the advancement of political liberalization (Beeson, 2010). Authoritarian Environmentalism, a different pathway from the prevailing democratic environmental governance approach, is attracting more attention. The concept of Authoritarian Environmentalism was initially introduced by Robert Heilbroner and William Ophuls. They proposed that effectively addressing environmental challenges necessitates 'an absence of inhibitions regarding the exercise

of power' and 'constrained freedom of speech' (Hammond, 1977; Heilbroner, 1991). Gilley defined Authoritarian Environmentalism as a public policy model that concentrates authority in a few executive agencies manned by capable and uncorrupt elites seeking to improve environmental outcomes (Gilley, 2012).

Unlike Democratic Environmentalism, which distributes authority among various governmental levels and agencies and promotes active public involvement (Holden, 2002). The concept of Authoritarian Environmentalism almost stands in the opposite pathway which contains several points. The first one is 'limited public participation'. In contrast to democratic environmentalism which sees public participation as the core value, Authoritarian Environmentalism constrains public participation in environmental issues and compels them to follow the government's more sustainable policies (Gilley, 2012). In terms of public participants, which may include individual citizens, civil society, the media, issue experts, business leaders and corporations, elected representatives, and social spaces like internet sites and schools (Smelser and Baltes, 2011). In other words, Authoritarian Environmentalism excludes most kinds of participants above from environmental policy-making and implementation stages.

Naturally, the central government is the only policy-processing (from policy-making to policy implementation) actor in an Authoritarian Environmentalism state. The 'central government-dominated policy processing' is also becoming the second crucial part. Under this circumstance, social factors, NGOs, and the public are barely included in the policy-making process (Beeson, 2010). After the collapse of the Soviet Union, authoritarianism was thought of as a taboo, and governments should not act as central planners. Still, they should be granted complete discretion to carry out public programs and to intervene in the personal and economic activities of citizens without having to abide by limitations emerging from citizens' private and democratic rights (Shahar, 2015). As Well pointed out, Authoritarian Environmentalism emphasizes the

importance of excluding business actors as well as other groups from participation, on the basis that they are most opposed to environmental action (Wells, 2007).

However, experts in relevant environmental fields are exempted from this participation limitation cage, which acts as one of the most important roles of such a system. Key policymakers view environmental challenges as matters best managed by the state and technocrats, attributing this stance to public ignorance and irrationality, the problem of free-riding, and the urgent need for decisive action (Han, 2015). This approach significantly emphasizes the influence of scientists and technocrats in guiding state policies. In such a model, participation is predominantly limited to scientific and technocratic elites, who receive their education from 'Real Universities' that impart 'accurate, uncensored, and scientifically valid knowledge'. However, the oversight and management of their roles fall under the purview of enlightened and incorruptible state leadership, referred to as 'ecoelites'. These ecoelites are responsible for the development and execution of policies, ensuring that environmental governance is both effective and informed by expert knowledge (Shearman and Smith, 2007).

Reflecting on the distinct attributes and operational mechanisms of authoritarian environmental governance, it becomes essential to delineate the specific benchmarks of Authoritarian Environmentalism. This endeavor is according to the concepts of Authoritarian Environmentalism, for summarizing a clear set of characteristics that delineate whether a state embodies the principles of Authoritarian Environmentalism. By doing so, we aim to provide a concrete, typical framework for identifying Authoritarian Environmentalism states. Through this framework, the aim is to offer clarity on the defining elements that mark a government's approach as distinctly authoritarian in the realm of environmental governance, thereby enabling a more precise identification and study of Authoritarian Environmentalism states.

Benchmarks of Authoritarian Environmentalism:

#### • Strong central control & Swift enactment and enforcement (Enforceability)

Authoritarian environmentalists believe that the cumbersome mechanisms of democracy cannot ensure sustainable development, that ecological issues are a prerequisite for all problems and should not be subject to democratic decision-making, and that state intervention is essential for environmentally sustainable development (Westra, 1998). Similarly, Gilley argues that AE concentrates power in a few executive agencies that are run by technical and uncorrupted elites to improve environmental outcomes (Gilley, 2012), these elites were also termed as 'eco-elites' (Shearman and Smith, 2007).

#### • <u>Limited public participation and transparency (Transparency)</u>

Thus authoritarian environmentalism can be defined as a kind of highly technocratic public policy pattern that excludes business and private interests from environmental policy design and making processes but is controlled by limited scientific experts and technical elites assigned by the government directly (Gilley, 2012). This model can help to improve the scientificity and efficiency of policy and can also have a rapid and comprehensive reaction to environmental problems but with some limitations of social actors and individuals' involvement.

#### • The 'top-down' policy processing (Legitimacy & Accountability)

In Authoritarian Environmentalism (AE) states, the central government emerges as the sole architect of environmental policy, establishing a top-down approach that has increasingly characterized the governance model in these states. This centralized policy-making process, where decisions flow downward through the governmental hierarchy, starkly contrasts with the democratic environmentalism model, where legitimacy is derived directly from public endorsement and consent (Gilley, 2012). Within AE states, the legitimacy of environmental policies at any government level is

essentially anchored in the mandates and perspectives of higher-level authorities, culminating in the central government's directives (Fraser et al., 2006). This structure significantly diverges from the democratic paradigm, where policies gain legitimacy through a participatory process involving public consensus.

Regarding accountability, the AE framework mirrors its approach to legitimacy, primarily attributing responsibility to upper echelons of government due to the limited scope for public engagement in the environmental policymaking process. This near absence of public participation means that accountability, much like legitimacy, is vertical supervision from upper levels of government to the bottom, contrasting with democratic systems where accountability is horizontally distributed among various stakeholders, including the public (Han, 2017). In such a scenario, the mechanisms for holding policymakers responsible for environmental outcomes are narrowly defined and centrally controlled, reflecting a governance style that prioritizes efficiency and directive clarity over participatory inclusiveness (Han, 2015).

#### • State-focused (Interests Preference & Global Engagement)

Authoritarian environmental governance typically prioritizes national interests and government-led initiatives, often at the expense of broader global cooperation and cosmopolitan values. Due to limited public participation, especially excluded social factors (including environmental NGOs), which also leads to limited global engagement (Gilley, 2012). Moreover, most Environmental governance policies were made by the central government, and without international supervision, it is very hard to make sure they distribute more resources on global environmental cooperation. In other words, it is hard to say the policy initiative vision is for global sustainability rather than state interests, no matter how the government describes it. (Beeson, 2010).

Drawing from the theories of the Green State and Authoritarian Environmentalism, six overarching benchmarks—Enforceability, Interest Preference,

Transparency, Global Engagement, Accountability, and Legitimacy—have been delineated (Table 1). These benchmarks serve as a nuanced framework for evaluating the positioning of China's Ecological Civilization within the spectrum of environmental governance models. In the ensuing chapter, this analysis will leverage government documents about Ecological Civilization as primary sources. Utilizing

	Enforceability	Interests Preference	Transparency	Global Engagement	Accountability	Legitimacy
Green State	Effective regulatory and redistributive mechanisms; integrates environmental goals with social justice.	Upholds local and global's ecological interests and values; acts as a vehicle for justice.	High; democratic responsibility and responsiveness with public engagement.	ty and global actions for green ess with values and avoids global actions for green active stakeholder activ		Built on inclusive governance, where stakeholder rights and international cooperation form the cornerstone of environmental stewardship.
Authoritarian Environmentalism	Strong central control; swift enactment and enforcement without public consensus.	Prioritizes national interests and government-led initiatives.	Limited; decisions made with minimal public consultation.	State-focused; prioritizes national ecological over global ecological interests, less emphasis on international cooperation.	Focusing on upper government levels with minimal public involvement.	Primarily derived from centralized decision-making rather than public consent.

Table 1 Benchmarks derived from the theories of Green State and Authoritarian Environmentalism (with definitions)

these benchmarks as foundational concepts, the study aims to develop a detailed coding system. This system will facilitate an in-depth investigation into how China's Ecological Civilization settles between Authoritarian Environmentalism and the Green State, offering insights into its unique approach to environmental governance.

## **5 Methodology**

This analysis adopts a qualitative framework, concentrating on the examination of official policy documents and interviews. The aim is to locate China's Ecological Civilization within the theoretical spectrum that spans from Green State principles to Authoritarian Environmentalism, employing specific pre-established benchmarks. To this end, the research will engage in a dual methodological approach: Evaluative Qualitative Text Analysis for the policy documents and Semi-Structured Interviews for case study insights.

Initially, Evaluative Qualitative Text Analysis will serve as the primary coding strategy for dissecting the nuances within policy documents related to China's Ecological Civilization. This method, as elucidated by Kuckartz, is instrumental for theory-driven inquiries. It entails a detailed assessment, categorization, and critical evaluation of content, rendering it exceptionally suited for analyzing the underlying values, stances, and judgments embedded in China's ecological policies against the benchmarks of Green State and Authoritarian Environmentalism (Kuckartz, 2014).

Subsequently, the research will utilize Semi-Structured Interviews to complement the document analysis, specifically focusing on the Clean Winter Heating Project in Northern China. Following the evaluative text analysis, these interviews aim to unearth deeper insights, supplementing the initial findings with personal narratives and expert opinions. The flexible nature of semi-structured interviews, highlighted by their use of open-ended questions, is ideal for eliciting comprehensive and nuanced responses from participants. This method not only facilitates the gathering of detailed information beyond the scope of official documents but also opens avenues for uncovering novel insights, potentially unaddressed in the textual analysis (Magnusson and Marecek, 2015).

Through the integration of these methodologies, the research endeavors to construct a nuanced and detailed portrayal of China's Ecological Civilization, offering a rich exploration of its positioning within the spectrum of environmental governance models.

### 5.1 Evaluative Qualitative Text Analysis

#### 5.1.1 Data Collection

The selection of governmental documents from central, sub-central, and provincial levels will elucidate the Communist Party of China's ecological goals and provide insights into the interplay between Green State principles and Authoritarian Environmentalism. As one of the most severe environmental problems in China, air pollution has earned the most attention from China's Communist Party (World Health Organization, 2024), the Clean Winter Heating Project in Northern China will be used as the case, to complement central Ecological Civilization document analysis, illustrating that under the system of Ecological Civilization, the designing of the specific project and its implementation of provincial policies.

In addressing the mounting environmental concerns, the Chinese government formally introduced the concept of Ecological Civilization during the 17th National Congress of the Chinese Communist Party (CCP) in 2007. This initiative, highlighted in a speech by Hu Jintao, aimed to foster a harmonious relationship between humans and nature through a comprehensive, scientific, and systematic approach (News Agency, 2007). Despite its foundational significance, this initial mention of Ecological Civilization will not be included in the document analysis of this study. The rationale for its exclusion lies in its preliminary nature, the term was briefly introduced, serving more as a conceptual inauguration rather than a substantive discourse. This study seeks to delve into subsequent reports and documents that offer a deeper exploration and

implementation strategies of China's Ecological Civilization, which present greater research value and insights into the evolution of this initiative.

Appendix 1 includes the titles of all the core documents for designing China's Ecological Civilization system, in chronological order of their development. These documents will be used as fodder for keyword coding, the rules of which are based on the Green State and authoritarian environmentalism. In this way, the core concepts of China's Ecological Civilization can be identified from the results of the coding process, and by finding the preferences of China's Ecological Civilization concepts between the two benchmarks of Green State and Authoritarian Environmentalism, China's Ecological Civilization's position on this spectrum can be determined.

In responding to the central government's general policies, sub-central departments, such as the Central Financial Leading Group (CFLG), Ministry of Housing and Urban-Rural Development, National Development and Reform Commission, Ministry of Finance, National Energy Administration and Ministry of Environmental Protection, also published a series of subordinate policies for reforming northern China's winter heating system. All of these policies aim to transform old coalheating methods into cleaner energy ways. I chose every policy about northern China's Clean Winter Heating Project as my material, which can provide us with a complete view of it (titles of the documents can be found in Appendix 1).

From the local level, the 'Northern China' in this project includes 14 provinces, which are Beijing, Gansu, Hebei, Heilongjiang, Inner Mongolia, Jilin, Liaoning, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Tianjin, and Xinjiang (Figure 1). Due to space constraints, it is hard to burrow into every province's situation, so I selected several typical provinces, which are Beijing, Hebei, Heilongjiang, Shaanxi, and Xinjiang. The selected provinces can represent most of the North provinces' situation and Table 2 shows the selection criteria. In addition to this, local policy documents

from selected provinces will also be used as materials (titles of the documents can be found in Appendix 1).



Figure 1 Provinces included in the Clean Winter Heating Project in Northern China (in green and yellow) and those selected for this study (in yellow).

	Location	Economic Development	Distance from Capital	Winter Average Temperature (from December to Feburary next year)	
Beijing	Capital	High	Captital	-3 ~ 5	
Liaoning	Northeast	Middle	Near	-10 ~ 0	
Shaanxi	Middle North	Middle	Average	-3 ~ 8	
Xinjiang	Northwest	Low	Very Far Away	-20 ~ -4	

Table 2 Selection criteria for provinces of Clean Winter Heating Project in Northern China

Due to the provincial governments respond to central policy in different ways, some provincial governments have adopted 'Clean Winter Heating' as part of air pollution control or clean energy development (e.g., Beijing and Xinjiang), while others have adopted 'Clean Winter Heating' as a separate treatment (e.g. Liaoning and Shaanxi). This difference can be seen in the titles of the official documents of the

provincial governments, but all of these documents show a further response to the central government's 'Clean Winter Heating' project.

#### 5.1.2 Data Analysis

Before the coding process, it is essential to note that, as the official documents are available only in Chinese, coding will be conducted directly in Chinese. This approach is adopted to ensure a more accurate grasp of the policy documents' intended meanings. After the coding phase, all critical passages and coding outcomes will be translated into English to facilitate the remainder of the analysis. This method guarantees both fidelity to the original texts and clarity in the subsequent analytical stages.

According to Kuckartz's process of evaluative qualitative text analysis, there are five main steps to finish the analysis, which are: 1) defining evaluative categories; 2) identifying and coding the text passages that are relevant for the evaluative category in question; 3) compiling the text segments coded with the same code; 4) define levels (values) for the evaluative categories and assign them to the text segments; and 5) evaluate and code the entire data set (Kuckartz, 2014). This research also relies on this process to do the document text analysis.

The foundational step in applying Evaluative Qualitative Text Analysis involves establishing a direct linkage between the research question and the analytical categories or types (Kuckartz, 2014). For this study, the pre-established benchmarks of the Green State and Authoritarian Environmentalism serve as pivotal categories, directly connected to the research question, thereby fulfilling this crucial prerequisite. Upon determining these main categories, the subsequent phase involves meticulously coding each text passage within the corpus of China's Ecological Civilization documentation that pertains to these benchmarks. This coding process aims to systematically categorize the textual evidence according to the benchmarks established. Following the coding phase, all text passages associated with a specific benchmark are aggregated

into a comprehensive table. This table not only organizes the data but also serves as a foundational element for further analytical endeavors. Through the examination of these compiled passages, the characteristics of China's Ecological Civilization, under the pre-established benchmarks, will be elucidated. Essentially, the characteristics attributed to each benchmark are derived from and defined by the associated text passages.

#### 5.2 Semi-Structured Interviews

#### **5.2.1 Data Collection**

To enrich the analysis of official documents, interviewees will be meticulously selected from various levels of stakeholders involved in the Clean Winter Heating Project. These include representatives from the local *Environmental Protection Agency (EPA)*, personnel from local heating companies, and residents affected by the project. This stratified selection ensures a holistic understanding of how the principles of Ecological Civilization permeate and influence local implementation and perception. By incorporating insights from these diverse perspectives, the study aims to construct a comprehensive portrait of how Ecological Civilization's concepts are interpreted and actualized at the grassroots level, thereby offering adjustment and complement to the result of the Ecological Civilization's position from the previous document analysis.

In terms of sampling strategy, interview participants were identified using a snowball sampling approach, a method where initial contacts recommend additional participants, who then suggest further individuals for inclusion in the study (Goodman, 1961). Initially, in terms of governmental official interviewees, starting with contacting a staff member who works for the Environmental Protection Agency in Xinjiang who provided access to the agency in Shaanxi, Beijing, and Liaoning. In the same way, I also used the connection with one staff at one of Shaanxi's heating companies who also introduced me to branch companies' colleagues based in Xinjiang, Liaoning, and

Beijing. When finding the interviewees from the local public residents, I utilized my network in each province and snowballed it.

Given the constraints of a limited research timeframe and the absence of an extensive contact network, the analysis of interview data will primarily serve to augment the document analysis. This approach aims to fill gaps by shedding light on aspects not evident in the documents or by elaborating on matters that remain ambiguous within the textual analysis. Consequently, ideally, in each province under study, interviews will be conducted with just one government official and one heating company staff member, ensuring focused and valuable additions to the foundational document-based insights. Regarding the resident interviewees, I chose one participant from each province, who is over 40 years old and has experienced the change in China's north heating project. The table below shows their codes (Table 3).

	Beijing	Liaoning	Shaanxi	Xinjiang
Officials at Local EPA	ВО	LO	SO	xo
Staffs at Local Heating Company	BS	LS	SS	XS
Local Residents	BR	LR	SR	XR

Table 3 Interviewees' codes

The selection of interviewees for this study was meticulously curated to include individuals deeply entrenched in the evolution of northern China's heating reform. All participants, encompassing officials, heating company staff, and residents, have resided or worked in their respective provinces for over fifteen years, potentially fostering more nuanced and critical perspectives on the developments under review. The age range of the interviewees was deliberately narrowed to between 40 and 60 years to mitigate the potential variability in responses attributable to age differences.

The demographic composition of the interviewees was carefully considered, especially regarding gender. While the resident group achieved gender parity with two males and two females, achieving such balance among government officials and

heating company staff proved challenging due to the predominant male representation in these sectors. Consequently, the selection comprised one female and three male Environmental Protection Agency (EPA) officials. Similarly, within the state-run heating companies, the gender composition mirrored this ratio, with one female staff member and three males selected for interviews.

Given the sensitive nature of the topic and the stringent oversight by China's Communist Party, special attention was dedicated to ensuring the privacy and safety of all participants. Therefore, beyond these details, no further demographic information will be disclosed, prioritizing the confidentiality and security of the interviewees throughout the research process.

#### 5.2.2 Data Analysis

Due to the limited English proficiency commonly observed among Chinese officials, all interviews were conducted in Chinese. An AI transcription service initially facilitated the transcribing of these interviews. Subsequently, the transcripts were translated from Chinese to English. To guarantee the fidelity and clarity of the translated materials, I meticulously reviewed all translated transcripts in collaboration with a fluent English speaker.

The formulation of interview topics was strategically guided by the outcomes of the document text analysis, particularly focusing on the uncertain characteristics identified within various categories. This approach aimed to ensure that the interviews effectively addressed and clarified these ambiguities. In the process of analyzing the interview transcripts, particular emphasis was placed on any mention of the categories previously identified from the document analysis. Each reference was highlighted for further scrutiny. Moreover, any new or contradictory characteristic emerging from the interviews was given considerable attention, and earmarked for an in-depth examination. This methodical approach to data analysis ensures that the interviews not

only complement but also enrich the findings derived from the official documents, providing a multifaceted understanding of the subject matter.

## 5.3 Integration of Analysis

After documents and interview transcripts analysis, according to the characteristics of Green State and Authoritarian Environmentalism under the six benchmarks, the theoretical positionings of China's Ecological Civilization in each step (central system design, sub-central project design, provincial policy-making, and local implementation) will be compared, as a means of discovering where China's Ecological Civilization truly falls on this pre-established theoretical spectrum.

#### 5.4 Ethical Consideration

In ensuring ethical integrity throughout the research, several key measures were implemented. Given the strict confidentiality policies of China's Communist Party, protecting interviewees' information was paramount. Measures included anonymizing participants' data by removing or altering personal identifiers during the analysis and reporting phases, and carefully handling translated interview transcripts to protect privacy. All privacy protections were detailed in the consent form, which was signed by participants (Appendix 2). Additionally, it was crucial to obtain informed consent from all interviewees, ensuring they understood the study's objectives, their role, and their right to withdraw at any time, with all terms explained in their native language to build trust and transparency.

Cultural sensitivity was also a priority, particularly in designing interview questions and interpreting responses, to respect and honor China's cultural norms and values. This approach helped maintain a respectful and inclusive research environment, considering participants' perspectives and cultural nuances.

# 6 Analysis

The analysis of China's Ecological Civilization within the context of the interplay between authoritarian and green democratic governance will be methodically divided into four distinct parts. Each section will utilize the pre-established theoretical framework and benchmarks to dissect and interpret the findings derived from both the document coding process and the interviews.

Firstly, the analysis will begin by examining the characteristics of China's Ecological Civilization through the coded results from central government documents. This section will set the foundational understanding of the government's ecological policy framework.

Secondly, the Clean Winter Heating Project in Northern China will serve as a focused case study. This analysis will employ the same coding framework used in the initial document analysis to provide two comparative explorations of the specific characteristics and implications of this project. The comparisons will highlight the theoretical position's alignments and divergences between the system of Ecological Civilization and specific project design and between projects designed at the subcentral department level and specific policies formulated at the provincial level.

Thirdly, according to the interviews of officials, company staff, and the public, the theoretical position's differences from the ecological policy-making (Winter Heating Project) process to the implementation on the ground will be explored and verified.

Finally, the previously derived results are summarized to arrive at an overall theoretical position of China's Ecological Civilization system.

# 6.1 Characteristics of China's Ecological Civilization

In this section, after coding the central government documents as mentioned before, the characteristics of China's Ecological Civilization could be generalized, based on 6 pre-established benchmarks. All the characteristics will be analyzed and categorized into Authoritarian Environmentalism (AE), Green State (GS), and ambiguous (amb) from the pre-established theoretical framework and the description of the central documents in this section, to position China's Ecological Civilization portrayed by the central's blueprint, between the spectrum from the Green State to the Authoritarian Environmentalism.

#### **6.1.1 Enforceability**

Under China's authoritarian regime, while there are noted drawbacks such as a lack of democratic involvement in decision-making processes (Brain and Pál, 2019), a significant advantage is the strong enforceability of policies. This is particularly evident in the rapid implementation of emergency pollution controls, where the government can circumvent the lengthy bureaucratic processes often seen in democratic systems (Dongol and Heinen, 2012). Although conflicts may arise between centralized environmental policies and local interests, the authoritarian structure generally manages these effectively (Chunmei and Zhaolan, 2010). This system facilitates the quick enforcement of regulations and directives, which is essential in scenarios like emergency pollution control where immediate action is critical. The capacity to swiftly enforce policies across various regions and sectors underscores the effectiveness of this governance model in addressing urgent environmental issues.

After a thorough analysis of the central documents about Ecological Civilization, its 'Enforceability' can be delineated into two primary dimensions: "Centralized Control" and "Government-Capital Cooperation," comprising several sub-categories. The resulting table (Table 4) details the descriptions of each code (characteristic), the

Codes (Characteristics)	Theory	Description	Reference	Source
Enforceability		The ability of a government to effectively implement and enforce laws, regulations, and policies within its jurisdiction.	37	5
A. Centralized Control	amb	Centrally controlled ways of ensuring effective implementation of policies.		5
a. Top-Down Management	AE	The central government directly controls the direction and formulation of policies, and the lower levels of government implement the policies formulated by the central government.	10	4
b. Financial Support	GS	Financial support from the central Government for the implementation of relevant policies.	2	1
c. Environmental Standards Backing	amb	Establishment and improvement of environmental standards by the central government as a basis for enforcing environmental policies.		3
d. Resource Distribution	GS	Centralized scheduling and distribution of resources by the central Government.	6	3
e. Public Opinion Guidance	AE	The central government control's public opinion by controlling the media so that the public supports the policies of the central government.	6	4
B. Government-Capital Cooperation	amb	Central government implements policies through partnerships with social capital and enterprises.	4	2

Table 4 Codebook of Enforceability

number of sources in which they appear, and the count of references for each, providing a structured overview of the enforceability components identified in the documentation.

#### A. Centralized Control

As an authoritarian state, the enforceability of China's environmental policies is largely driven by 'Centralized Control,' which typifies the state-led policy-making process (Li and Shapiro, 2020). In order to facilitate a policy process dominated by a strong central government, China's Ecological Civilization incorporates several key strategies: Top-Down Management, Financial Support, Environmental Standards Enforcement, Resource Distribution, and Public Opinion Guidance. These elements are integral to ensuring that environmental policies are implemented effectively across the nation.

# a. Top-Down Management

The central documents pertaining to China's Ecological Civilization clearly illustrate its authoritarian color in that the central party consistently acts as the primary policymaker, disseminating policy directives to lower-level governments. In this hierarchical

process, the central government not only holds the supreme authority in policy-making but also possesses the power to oversee and control local government activities. This centralization of power is evident in key documents such as the "Opinions of the Central Committee of the Communist Party of China and the State Council on Accelerating the Construction of Ecological Civilization," issued by the State Council of the People's Republic of China. These documents serve as representative references highlighting the centralized approach to environmental governance.

Party committees and governments at all levels have overall responsibility for ecological civilization construction in their regions and should set up coordination mechanisms to form a working pattern conducive to the promotion of ecological civilization construction. All relevant departments should closely coordinate and cooperate in accordance with their division of responsibilities, so as to form a strong joint force for the construction of Ecological Civilization (State Council of PRC, 2015).

These references underscore the robust top-down management system employed in advancing China's Ecological Civilization. Additionally, they illustrate that while local governments may develop their own policies, these must align closely with central directives, which serve as stringent guidelines that cannot be deviated from. This ensures consistency and adherence to the overarching goals set at the national level.

#### b. Financial Support

Under the centralized management system, a significant challenge is how local governments can effectively implement ecological policies that do not yield direct economic profits, as mandated by the central government. In a rapidly developing China, local governments often prioritize economic development because it is closely linked to the performance assessments of local officials, which in turn can significantly impact their future career advancements (Beeson, 2018). To address this dilemma, the central government has increased financial support to local authorities, aiming to

alleviate the economic burden associated with enforcing environmental protection measures. This financial backing helps ensure that local governments are more motivated to fulfill ecological directives without compromising their economic objectives.

Improving pricing, fiscal and taxation, financial, and other policies to motivate and guide all kinds of main actors to actively participate in the construction of ecological civilization (State Council of PRC, 2015).

In line with the requirements of a green state, a green state should have an effective fiscal guidance mechanism (Eckersley, 2004), the references indicate that the Chinese central government has committed, through its policy documents, to providing centralized financial and tax support for ecological protection and the development of new energy sources. Furthermore, since 2011, the criteria for promotions and bonuses for local government officials have been officially expanded to include not only economic growth and social stability but also environmental protection. According to Li and Shapiro (2020), some local governments even withhold promotions based on poor environmental performance. This shift in policy ensures that centrally allocated financial support is more effectively channeled into ecological conservation initiatives, aligning local government actions with national environmental goals.

#### c. Environmental Standards Backing

To enhance the effectiveness and reliability of centralized enforceability, it is crucial to establish a comprehensive set of environmental standards. Reflecting the ethos of China's Ecological Civilization, there is a call for the development of rigorous standards that govern resource consumption, conservation, and emission restriction, facilitating a more legitimate and systematic approach to governance. Additionally, the central government encourages local governments to adopt even more stringent standards than those mandated centrally. This not only promotes greater environmental

protection but also allows for regional adaptations that address local ecological challenges more effectively.

Accelerate the formulation and revision of several standards on energy consumption, water consumption, land consumption, pollutant emissions, environmental quality, etc., implement the "frontrunner" system for energy efficiency and emissions intensity, and accelerate the pace of upgrading standards (State Council of PRC, 2015, 2021).

In addition to establishing standards for resource conservation and emission limitations, according to the "Outline of the Thirteenth Five-Year Plan for National Economic and Social Development of PRC," the central government has also proposed the creation of an ecological evaluation system. This system is designed to monitor the environmental performance and resource usage of local jurisdictions comprehensively. Under this supervision framework, the environmental activities of each locality are assessed and reported up through the levels of government, ultimately reaching the central authorities. This structure also strengthens the central government's ability to enforce environmental policies effectively.

Establishing a nationally unified and comprehensively covered real-time online environmental monitoring and surveillance system, and promoting the construction of big data for environmental protection (State Council of PRC, 2016).

### d. Resource Distribution

In terms of resource distribution, similar to the Green State's requirement for the ability to redistribute sources, all exclusive rights to distribute all natural resources belong to the central government under the control of the Ministry of Natural Resources. The Constitution of the PRC asserts state ownership over crucial natural resources including minerals, land, and water which significantly enhances the enforceability of the nation's Ecological Civilization initiatives (The State Council of China, 2019).

Strengthen the control of strategic resources such as energy, water, and land, reinforce the control of energy consumption intensity, and manage the total amount of energy consumption by rationally setting a "ceiling" for resource consumption (State Council of PRC, 2015, 2016; Xi, 2017).

By centralizing resource distribution, the government can more easily enforce regulations that promote ecological conservation and prevent the over-exploitation of natural resources, thus supporting the broader goals of China's Ecological Civilization under a cohesive and authoritative regulatory regime.

#### e. Public Opinion Guidance

The term "public opinion guidance" emerged as a key strategy for the Communist Party of China in the 1990s, specifically in response to declining trust in its political ideology during the mid-1980s (Chan, 2007). In advancing China's Ecological Civilization, this method is used to promote sustainable practices such as energy conservation, low carbon emissions, and adopting environmentally friendly lifestyles. Moreover, central government directives require that all levels of government agencies and state-operated companies lead by example by adhering to stringent ecological standards. Additionally, the education system plays a crucial role in this strategy, with schools at every level—from primary to universities—incorporating central policies into their curriculum to guide students.

Fully utilizing the role of the news media, establish a rational and positive public opinion orientation. Make education on ecological civilization an important part of quality education, and incorporate it into the national education system and the training system for officials (State Council of PRC, 2015).

This authoritarian technique involves leveraging centralized control over people's opinions, the domestic media, and the education system to articulate the government's vision and disseminate its policy directives directly to the public. By monopolizing the channels through which people access information, the state creates an environment conducive to effectively enforcing its policies.

#### **B.** Centralized Control

Although the enforceability of China's Ecological Civilization largely stems from the centralized control exerted by the Communist Party of China, the landscape began to shift following the economic reforms and opening up in 1978. Since then, governments at all levels, various departments, village collectives, and social organizations have increasingly engaged in activities such as inviting investment and running enterprises (Xie, 2020). Over the past 44 years of political and economic reforms, social capital has emerged as a significant force in bolstering the state's economic development and supporting the implementation of central policies.

Strengthen the status of enterprises as the main body of technological innovation, and fully utilize the decisive role of the market in choosing the direction of green industry development and technological routes (State Council of PRC, 2015).

Key policy documents such as the "Opinions of the Central Committee of the Communist Party of China and the State Council on Accelerating the Construction of Ecological Civilization," along with the outline of the Fourteenth Five-Year Plan, illustrate this shift. These documents outline several strategies for achieving the goals of Ecological Civilization in cooperation with social capital. These strategies include green credit, ecological compensation, and the marketization of natural resource prices, among others. These approaches make a significant complement to the traditional top-down enforcement mechanisms.

Promote green credit and support eligible projects to be financed through the capital market. Improve market-oriented and diversified ecological compensation, and encourage various types of social capital to participate in ecological protection and restoration (State Council of PRC, 2015, 2021).

#### **6.1.2 Interests Preference**

As the global ecological environment continues to deteriorate, nations are increasingly recognizing the urgency of addressing environmental challenges and crafting relevant policies. Logically, the primary motivation for governments in developing these policies should be the resolution of global environmental issues. Yet, in practice, the reality is far more complex. The interplay of various interests and the competitive dynamics among countries globally often preclude governments from formulating domestic environmental policies solely with the altruistic goal of addressing worldwide problems. Consequently, a multitude of factors come into play, influencing each country's environmental policy preferences and shaping their approaches in distinct ways.

China's ecological civilization system is similarly impacted by these complexities. While the state focuses more on its own environmental governance when formulating policies, Eckersley states in her Green State Theory that *a green state* should prioritize the preservation of environmental justice over the acquisition of self-serving power (Eckersley, 2004). It is therefore more important to look at whether the state's profit motive is more concerned with environmental justice or political power when formulating domestic and foreign policies.

Codes (Characteristics)	Theory	Description	Reference	Source
Interests Preference		Driving interests of the government in developing environmental policies.		6
A. For Home State	amb	Focus more on home country interests rather than on global ecological sustainability.		6
a. People's Welfare	amb	Focus on improving the quality of the environment in which people live.		4
b. Economic Sustainability	amb	Focus on developing a sustainable economy (more of a policy response to international pressure to move towards sustainable economic development).		3
c. Ecological Security	amb	Focus on responding to national environmental crises.	6	4
d. Continuity of the Party Authority	AE	Concerned about maintaining the legitimacy of the ruling Communist Party of China.		3
e. International Influence	AE	Enhancing international status by improving domestic environmental conditions.		2
B. For Global Ecosystem	GS	Upholds cosmopolitan interests and values; acts as a vehicle for global ecological justice.	2	2

Table 5 Codebook of Interests Preference

As official documents of the central government are analyzed through coding, the specific interest preferences underlying China's ecological civilization become increasingly evident. The analysis of central documents reveals that the interest preferences guiding China's Ecological Civilization can be broadly categorized into two main areas: 'For Home State' and 'For Global Ecosystem.' These categories encompass specific sub-categories, which are detailed in Table 5.

#### A. For Home State

Generally, the imbalance of state power means that national interests often take precedence over global objectives. As Bernauer and Bättig point out, no single country or agency can act as a central enforcer to align the diverse interests of different nations into universally binding global decisions (Bernauer and Bättig, 2009). This tendency is evident in the central official documents related to China's Ecological Civilization, which show that the primary motivations for developing this ecological management system are predominantly state-centric. These driving interests can be specifically categorized into five key aspects: enhancing the welfare of the people, ensuring economic sustainability, securing ecological safety, maintaining the continuity of Party authority, and expanding international influence.

#### a. People's Welfare

The motto "Serve the People," a self-proclaimed and central political principle of the Chinese Communist Party (CCP), has consistently guided policy-making since its formal inclusion in the Party Constitution during the Seventh National Congress of the CCP in 1945. This principle was explicitly declared as the fundamental tenet of the CCP, emphasizing the Party's commitment to prioritizing the welfare of the Chinese people (National Congress, CCP, 2022). Following this guiding principle, the interests and preferences underlying China's Ecological Civilization have been shaped with a similar intent— to enhance the living quality and welfare of the Chinese populace.

The modernization we want to build is one in which human beings live in harmony with nature, creating more material and spiritual wealth to meet the people's growing needs for a better life, and providing more high-quality ecological products to meet the people's growing needs for a beautiful ecological environment (State Council of PRC, 2015, 2016; Xi, 2017).

Specifically, from the central document, the foundation of China's Ecological Civilization system is rooted in the concern for the health and well-being of its citizens. Accordingly, environmental policies focused on the management of air, water, and soil are formulated with this priority in mind, ensuring that public health drives the development and implementation of these crucial initiatives.

# b. Economic Sustainability

As China experiences rapid economic growth, escalating environmental issues have emerged as significant constraints on further development. Domestically, environmental degradation from over-industrialization has led to widespread public dissatisfaction regarding living conditions, prompting the central government to seek solutions through economic transformation (Zhang, Wen, and Peng, 2007). This shift aims at achieving sustainable economic development to address these environmental challenges effectively. Internationally, with China's growing status on the global stage, there is increasing pressure for the country to assume greater international responsibilities (Williams, 2014).

Accelerating the promotion of ecological civilization is an inherent requirement for accelerating the transformation of the mode of economic development and improving the quality and efficiency of development (State Council of PRC, 2015, 2021).

This global expectation compels the Chinese government to moderate its domestic economic expansion somewhat, reinforcing the need to pursue sustainable development strategies. These dual pressures push China to seek the critical balance between continuing its economic growth and enhancing its environmental stewardship.

# c. Ecological Security

Mitigating the impacts of climate change, while still a secondary driver, is increasingly influencing climate change policy (Williams, 2014). As noted previously, China's rapid economic growth has escalated environmental problems to a level that demands immediate attention. Establishing an ecological civilization system aims to alleviate existing ecological crises and prevent new ones from emerging. A report by the Intergovernmental Panel on Climate Change (IPCC) warns that China could face a deepening ecological crisis, prompting increased efforts by the central government to address these issues (Field et al., 2014). Official documents indicate that the ecological civilization initiative focuses on resolving critical problems such as land desertification, soil erosion, air pollution, and biodiversity decline.

It is necessary to implement major ecological restoration projects, enhance the production capacity of ecological products, promote the comprehensive management of desertification, rocky desertification, and soil erosion, expand the area of forests, lakes, and wetlands, and protect biodiversity (Xinhua News Agency, 2007; State Council of PRC, 2015).

To prevent further ecological crises, the system includes various risk prevention and control measures that enhance the nation's capability to respond to environmental emergencies, thereby ensuring national ecological security. Thus, the focus on ecological security represents acts as one of the vital interests driving the development of China's ecological civilization system.

Strengthening the construction of an ecological civilization system, establishing a comprehensive ecological risk prevention and control system, enhancing the ability to respond to ecological and environmental emergencies, and safeguarding national ecological security (State Council of PRC, 2016).

#### d. Continuity of the Party Authority

After Xi Jinping came to power, he first put forward the concept of the "Chinese Dream", which is to achieve the slogan "Realizing the Great Revival of the Chinese

Nation," which was put forward in 2002 to govern the country (Central Literature Press (PRC), 2013). The so-called "Chinese Dream" refers to the goal of enhancing the country's strength, improving people's quality of life, and spreading Chinese culture under the leadership of the Communist Party of China. Xi Jinping, in his 2017 report to the 19th National Congress of the Communist Party of China, proposed the vehicle for achieving this goal, namely a five-pronged approach combining political, economic, cultural, social, and ecological civilization (Xi, 2017).

Putting the construction of Ecological Civilization in a prominent position, integrating it into all aspects and the whole process of economic, political, cultural, and social construction, striving to build a beautiful China, and achieving the sustainable development of the Chinese Dream (Xinhua News Agency, 2007; State Council of PRC, 2015).

This underscores that the realization of Ecological Civilization is a critical component of the "Chinese Dream" and plays a pivotal role in continuing the governance of the Communist Party of China (CCP). In essence, the development and effective implementation of the Ecological Civilization system serve as essential tools for the CCP to maintain and enhance its credibility and prestige as a ruling party.

#### e. International Influence

As China's economy expands, there is a growing focus on elevating its international stature and influence (Williams, 2014). A key strategic interest behind China's development of an ecological civilization is to foster a reputation as a "responsible great power." This entails prioritizing environmental sustainability and championing ecological progress, enabling China to present itself as a global leader dedicated to addressing critical ecological challenges. This approach not only aims to enhance China's international image but also aligns with its broader geopolitical strategy of demonstrating leadership in global environmental governance.

Integrating the domestic and international situations, accelerating the construction of Ecological Civilization with a global perspective, building the

image of a responsible great power, and transforming green development into a new comprehensive national power, comprehensive influence, and new advantages in international competition (State Council of PRC, 2015).

However, despite these outward intentions, analyses, such as those found in the 'Global Engagement' section, suggest that China often remains a conservative player in international cooperation, showing hesitance to fully embrace the responsibilities typically associated with a great power.

#### **B.** For Global Ecosystem

From the initial document on Ecological Civilization highlights both domestic ecological optimization and contributions to global ecological security, the emphasis on global ecological concerns remains notably understated compared to national interests. This is evident from a close examination of the central document on Ecological Civilization, which primarily emphasizes domestic ecological improvements.

The establishment of Ecological Civilization will reverse the deterioration of the ecological environment at source, create a good production and living environment for the people, and contribute to global ecological security (Xinhua News Agency, 2007).

Furthermore, although "The Opinion of the Central Committee of the Communist Party of China and the State Council on Accelerating the Construction of Ecological Civilization" mentions global ecological security and climate change, such references are limited and do not indicate a strong or consistent focus on global ecological concerns.

The development of Ecological Civilization is a major initiative to actively address climate change and safeguard global ecological security (State Council of PRC, 2015).

This suggests that while there is some recognition of global ecological issues that fit the guideline of the Green State, the overarching interest preferences of China's Ecological Civilization system remain heavily skewed towards addressing national rather than global ecological challenges.

## **6.1.3 Transparency**

When we refer to government transparency, we can always associate it with a strong link to democratic government. However, in authoritarian states like China, a certain degree of transparency also exists (at least as evidenced in central policy documents). Especially in areas such as environmental governance, which does not have a great impact on the stability of the CCP's one-party rule, the government is willing to make that part of its policymaking and implementation transparent to a certain extent, so as to allow the public to participate in the governance of the environment (Tan, 2014).

Codes (Characteristics)	Theory	Description	Reference	Source
Transparency		The openness of government actions, decisions, and data to the public.	4	3
A. Information Opening	GS	Accessibility to the policies information.	4	3

Table 6 Codebook of Transparency

Documents relating to China's ecological civilization system illustrate that transparency is primarily facilitated through the disclosure of information (see Table 6), thereby upholding the public's right to know. This approach reflects a strategic decision to enhance openness in specific governance areas where it supports broader state objectives and public engagement without compromising the control of the Communist Party.

#### A. Information Opening

The importance of information openness as a foundational element for implementing government transparency policies is repeatedly emphasized in official documents. Within China's ecological civilization system, this openness primarily manifests through the disclosure of government environmental monitoring data and corporate pollution information. Additionally, central government documents highlight the need

to enhance the environmental public interest litigation system, details of which will be further explored in the "Accountability" section.

Improve the public participation system, disclose all kinds of environmental information in a timely and accurate manner, expand the scope of public disclosure, protect the public's right to know, and safeguard the public's environmental rights and interests (State Council of PRC, 2015, 2016).

However, the effectiveness of these reforms in an authoritarian context, where government control is pervasive, may be limited (Tan, 2014). This perspective invites skepticism about whether these transparency measures are substantially implemented or primarily serve as rhetorical tools to bolster the government's image. Anyway, in the ideal discourse of China's Communist Party, this 'Information Opening' definitely aligns with the Green State's requirement.

# **6.1.4 Global Engagement**

As China's economic power has grown, so too has its concern for its international image. This increasing focus has led China to become more active in global environmental governance, marked by a rise in international cooperation and increasing in international assistance efforts. However, the reality is more complex than the narrative China promotes as a "responsible power" on the global stage (State Council of PRC, 2015). In practice, China is quite cautious and often sensitive towards any international agreements that it perceives as potentially "unfair" (Williams, 2014).

Codes (Characteristics)	Theory	Description	Reference	Source
Global Engagement		Attitudes of countries towards global environmental governance and the current level of their international cooperation.	6	4
A. Conditional International Cooperation	AE	Sensitivity to the allocation of inputs for international environmental cooperation, and undertaking conditional international cooperation.	6	4

Table 7 Codebook of Global Engagement

From the analysis of the central document, China's characterization of global environmental cooperation can be summarized as the provision of conditional international cooperation and assistance in a limited number of regions (see Table 7).

This guarded approach reflects a nuanced strategy where China balances its global leadership aspirations with the protection of its national interests.

# A. Conditional International Cooperation

The analysis of central documents indicates that China's engagement in global environmental cooperation adheres to the principle of "common but differentiated responsibilities." This stance has emerged from China's criticism of developed countries for overlooking historical emissions in climate change negotiations. China contends that it is reasonable for its emissions and pollution levels to be higher during periods of rapid economic growth, similar to historical patterns observed in Western industrialized economies, which also experienced significant pollution during their development phases (The State Council Information Office, PRC, 2023). Consequently, China views it as unjust to be judged solely by current standards, arguing that this represents an attempt by Western countries to constrain its economic growth (Wan and Liu, 2021). This perspective is consistently reflected in China's diplomatic and policy approaches in international environmental forums. It has also been argued that international pressure has led China to engage in international environmental cooperation and that this principle of "common but differentiated responsibilities" is a tradeoff for China (Williams, 2014).

Adhering to the principle of common but differentiated responsibilities, actively and constructively participating in international negotiations on addressing climate change, and promoting the establishment of a fair and reasonable pattern of global response to climate change (State Council of PRC, 2015).

Additionally, China's confidence in the effectiveness of the United Nations Framework Convention on Climate Change has been eroding due to perceived inadequate efforts by developed countries, such as the United States and Australia, in addressing global environmental governance (Williams, 2014). In response to this perceived inaction, and weakened international pressure, China has pivoted towards promoting "South-South cooperation." This strategic shift focuses on fostering

collaboration and assistance with neighboring and other developing countries, an approach driven by the practical benefits that regional cooperation can offer to China itself. This refocused strategy aligns more closely with China's immediate geopolitical and environmental interests.

Strengthen South-South cooperation and green aid to provide support and assistance to other developing countries (State Council of PRC, 2015, 2016).

## 6.1.5 Accountability

Accountability is considered to be a system where politicians (governments) avoid being blamed by the people and the people reward or sanction politicians (governments) (Fearon, 1999). Accountability exists in democracies as an integral part of the political system to ensure that politicians (governments) act in the interests of citizens. In authoritarian states, however, accountability exists in a different way. Unlike in democracies, where the motivation of political actors to avoid blame stems mainly from electoral pressure (Weaver, 1986), in authoritarian countries, especially in China, the fact that authoritarian governments do not have to cater to the interest preferences of citizens in a centralized government has led to the creation of a top-down system of accountability (Ran and Jian, 2021).

Codes (Characteristics)	Theory	Description	Reference	Source
Accountability		The obligation of government entities and officials to be answerable for their actions and decisions to the public and to their institutional stakeholders.	26	6
A. Top-Down Supervision	AE	Direct supervision of lower levels of government by higher levels of government.	18	6
a. Performance Supervision and Evaluation	AE	Centralized assessment and regulation of environmental performance.	10	3
b. Bottom-Up Responsibility Tracing	AE	Bottom-up responsibility tracing of officials under the supervision of the central government.	8	4
B. Multistakeholder Involvement	GS	Multiple parties—including government entities, businesses, civil society organizations, and the general public—participate in the accountability process.	8	4

Table 8 Codebook of Accountability

Moreover, despite the limited opportunities for citizen participation in politics typical of authoritarian states like China, central government documents do include references to 'establishing and perfecting a public monitoring system' and

'strengthening social supervision.' These phrases suggest an element of democratic engagement within China's ecological civilization system (see Table 8). This inclusion indicates a recognition, at least nominally, of the value of public involvement and oversight in environmental governance, which can be seen as an attempt to integrate more participatory approaches within the broader framework of state control (State Council of PRC, 2015).

### A. Top-Down Supervision

The traditional theory of Blame Avoidance Behavior (BAB) suggests that in authoritarian states, there is generally a lack of incentives for politicians or governments to avoid blame, primarily due to limited public participation in the accountability process (Weaver, 1986). However, in China, the dynamics of authoritarianism include unique incentives to avoid blame, which stem from the hierarchical nature of Chinese bureaucratic politics. In this system, officials are motivated to avoid censure from higher levels of government, which could negatively impact their career trajectories (Ran and Jian, 2021). This fear ensures that government officials at all levels adhere closely to the implementation of central government policies, thus facilitating governmental accountability.

In the context of China's Ecological Civilization system, accountability is primarily enforced through authoritarian top-down centralized supervision. This approach is characterized by two key mechanisms: performance appraisal pressures, and bottom-up accountability, which are overseen by central authorities. Together, these elements create a structured system of accountability that, while distinct from democratic models, still aims to ensure effective policy implementation and environmental governance.

# a. Performance Supervision and Evaluation

The development of ecological performance assessments and evaluations represents a critical top-down monitoring approach within China's Ecological Civilization system.

This performance appraisal system specifically includes the assessment of resource consumption, environmental damage, and ecological efficiency among other indicators. Importantly, it moves away from using socio-economic development as the sole criterion for assessing the performance of government officials. This broader scope encourages local governments to prioritize environmental policies more significantly.

Effectively implement the environmental responsibilities of local governments, and carry out environmental protection inspections. Indicators of resource consumption, environmental damage, and ecological efficiency have been incorporated into the comprehensive evaluation system for economic and social development, the weight of the assessment has been substantially increased, and economic growth has not been used as the sole criterion for measuring the government's performance (State Council of PRC, 2015, 2016).

Furthermore, local governments at all levels are mandated to report on policy implementation either to higher levels of the State Council or directly to it. To enhance accountability and minimize corruption associated with bureaucratic processes, independent environmental monitoring departments have been established. These departments are tasked with overseeing the enforcement of environmental policies by local governments, ensuring that ecological directives are implemented effectively and transparently.

All regions and departments shall promptly report to the CCP Central Committee and the State Council on the implementation of the program, with a copy to the National Development and Reform Commission. The Central Committee will organize and carry out special supervision and inspection on the implementation of the situation in due course (State Council of PRC, 2015).

### b. Bottom-Up Responsibility Tracing

As a complement to the top-down monitoring system, the CCP Central Committee has implemented measures to address potential corruption or dereliction of duty among government officials, particularly those in senior positions. The "outgoing audits of natural resource assets of government leaders," emphasized repeatedly in central

Ecological Civilization documents, exemplify this approach. This system mandates that senior government officials undergo an audit of their management of natural resource assets and their protection of the ecological environment upon leaving office (General Office of CCP and the State Council of PRC, 2017). This includes officials responsible for local governments and those in departments at all levels that deal with natural resource management and environmental protection (General Office of CCP and the State Council of PRC, 2017).

A system of Natural Resource Assets Audit for Leading Officials has been established to enforce strict accountability. Officials who violate scientific development requirements and cause significant damage to natural resources, the environment, and ecology will face lifelong accountability. Such violations will be recorded, and the individuals involved will be barred from important positions or promotions, with accountability extending even after they have left their positions (State Council of PRC, 2015, 2016, 2021).

During these audits, environmental responsibilities are scrutinized at each level, assessing the environmental conditions within the jurisdiction of the departing officials (General Office of CCP and the State Council of PRC, 2017). If environmental issues are identified, the responsibility is traced back up through the chain of command to the highest-ranking officials involved. Conducted by the Audit Office of the CCP Central Committee, the findings of these audits are then addressed by the Central Commission for Discipline Inspection and Supervision (CCDI), which has the authority to impose disciplinary actions that can significantly impact the careers of those audited (General Office of CCP and the State Council of PRC, 2017). In cases of severe misconduct, such as corruption, these actions can extend to criminal liabilities, reinforcing accountability and integrity within the governance framework.

#### **B.** Multistakeholder Involvement

China's Ecological Civilization system includes an element of third-party accountability, incorporating a multi-party approach that extends beyond the

centralized controls typical of fully authoritarian environmental governance. Official documents suggest the involvement of the media and the public as watchdogs to enhance the effectiveness of ecological policies. However, this inclusion seems to be within a controlled framework rather than allowing full participation in the accountability process.

Actively promote third-party management of environmental pollution and introduce social forces into environmental pollution management (State Council of PRC, 2015).

For instance, the documents specify that the media should "establish a positive public opinion orientation and strengthen the publicity of the ecological civilization system." This directive suggests a role for the media that is more about endorsing government policies and fostering favorable public sentiment than about critiquing or challenging governmental actions. As for public involvement, the documents mention that "relevant organizations can initiate public interest litigation based on public opinions," yet these organizations are not clearly defined, implying that such actions are to be within the bounds of government-approved entities.

Give full play to the role of the news media, establish a rational and positive public opinion orientation, strengthen the publicity of the national situation of resources and environment, and popularize the laws and regulations of Ecological Civilization and scientific knowledge (State Council of PRC, 2015).

The establishment of a public interest litigation system for the environment, whereby relevant organizations may initiate public interest litigation against acts of environmental pollution and ecological damage (State Council of PRC, 2015).

This approach indicates a nuanced Green State strategy where the participation of third parties in the accountability process is encouraged but remains tightly regulated, ensuring that it aligns with governmental objectives and does not challenge the prevailing authority structure.

# **6.1.6 Legitimacy**

ls gain the mandate to govern based on the acceptance of the populace. Conversely, authoritarian regimes often rely on more complex mechanisms to secure public acceptance and voluntary compliance, usually drawing legitimacy primarily from the effectiveness of government performance (Lian and Li, 2024). This involves building credibility through the successful implementation of policies that visibly improve societal conditions, thereby earning public trust.

Codes (Characteristics)	Theory	Description	Reference	Source
Legitimacy		Legitimacy gained through core beliefs shaped by political parties.	18	6
A. Core Values from the Party Central	AE	Legitimacy gained through core beliefs shaped by political parties.	2	2
B. Law & Regulation-Making from the Central	AE	Legitimacy is transmitted from the top down through the government hierarchy and generally derives from the words of leaders.	16	6

Table 9 Codebook of Legitimacy

Upon examining central government documents, the legitimacy of China's Ecological Civilization system can be attributed to two principal sources in Table 9. First, the core ideologies promulgated by the CPC Central Committee, provide foundational principles and strategic direction. Second, legitimacy is reinforced through the establishment and enforcement of basic systems and laws by the central government, which institutionalizes these ideologies into actionable and enforceable frameworks. These elements collectively underscore the authoritative basis from which China's ecological policies derive their legitimacy, guiding and justifying the government's actions in environmental governance.

# A. Core Values from the Party Central

The legitimacy of authoritarian governments often rests significantly on the effectiveness of their governance. This is particularly evident in China, where the Communist Party of China has been instrumental in shaping the country's political and development trajectory since it assumed power. Key to this influence is the political theories introduced by successive leaders, each tailored to the evolving needs of

China's development. These include Mao Zedong's Thought, Deng Xiaoping's Theory, Jiang Zemin's "Three Represents" Important Thoughts, and Xi Jinping's Thoughts on Socialism with Chinese Characteristics for a New Era.

Guided by Deng Xiaoping's Theory, the Important Thought of the "Three Represents" and the Scientific Outlook on Development, implementing in-depth the spirit of the series of important speeches of General Secretary Xi Jinping, so as to achieve the construction of an Ecological Civilization (State Council of PRC, 2015).

These doctrines have not only gained popularity but have also been pivotal in guiding China through various developmental phases, thus reinforcing the belief that the government is capable of efficient administration through their application. Consequently, these foundational party ideologies also serve as a cornerstone for legitimizing China's commitment to ecological civilization.

# B. Law & Regulation-Making from the Central

Grounded in the core ideology of the Party Central Committee, the central government wields the legal authority to establish and implement a comprehensive Ecological Civilization system. The frameworks and legislation developed at the national level form the bedrock of legitimacy for local governments. Central government directives articulate various environmental protection frameworks that local authorities adopt as guidelines for crafting and executing their own policies. This methodical approach transitions the basis of legitimacy from mere public satisfaction with the party's performance to profound confidence in the party's fundamental ideology.

In order to build Ecological Civilization, it is necessary to establish a systematic and complete Ecological Civilization system and to protect the ecological environment by means of the system. Developing laws and regulations on energy conservation assessment and review, water conservation, climate change, ecological compensation, wetland protection, biodiversity protection, soil environmental protection, etc., and amending the Land Management Law, Air Pollution Prevention and Control Law, Water Pollution Prevention and

Control Law, Energy Conservation Law, Law on the Promotion of the Circular Economy, Mineral Resources Law, Forestry Law, Grassland Law, and the Law on the Protection of Wild Animals (Central Committee of the CCP, 2013; State Council of PRC, 2015, 2016, 2021).

This shift not only empowers the central government to devise robust environmental regimes but also legitimizes the environmental policies of local governments, aligning them with national objectives.

#### 6.1.7 Positioning of China's Ecological Civilization -- From Ideal Central Frame

After analyzing the central documents, a clearer understanding of China's Ecological Civilization emerged. According to the Communist Party of China's blueprint, the governance system of China's Ecological Civilization is not entirely authoritarian. A proportion table was created to situate it within the spectrum from Green State to Authoritarian Environmentalism (Table 10). This table quantifies the presence of Green State and Authoritarian Environmentalism in the document. Specifically, it categorizes certain characteristics as either Green State, Authoritarian Environmentalism, or ambiguous based on the frequency of references to each characteristic. By calculating the number of references under each benchmark and their respective percentages, we can estimate the proportional representation of these theories in the ideal model of China's Ecological Civilization.

	Enforeceability	Interests Preference	Transparency	Global Engagement	Accountability	Legitimacy	Total	GS/AE
Green State [GS]	16.67%	6.45%	100%	0%	26.47%	4.76%	16.67%	16.67% /
Authoritarian Environmentalism [AE]	30%	22.58%	0%	100%	55.88%	85.71%	43.59%	43.59% = 0.38
ambiguous [amb]	53.33%	70.97%	0%	0%	17.65%	9.52%	39.74%	

 ${\it Table~10~The~proportions~of~two~theories~under~six~benchmarks~from~central~documents}$ 

The results reveal that under ideal conditions, while Authoritarian Environmentalism predominantly characterizes China's Ecological Civilization system (43.59%), elements of Green State theory are also significantly represented in central government documents (16.67%). This is particularly evident in benchmarks such as

Enforceability (16.67%), Transparency (100%), and Accountability (26.47%). The final ratio of the two theories in the Chinese Ecological Civilization system was derived by calculating the ratio of the total percentage of GS and AE as 0.38. However, these findings are based on an idealized scenario; the actual dynamics may vary when the Ecological Civilization system is implemented in specific projects or integrated into daily life. The subsequent section will analyze specific environmental policies within this framework, focusing on the Clean Winter Heating Project in Northern China.

# 6.2 The Clean Winter Heating Project in Northern China

The case study can provide a more reliable analysis for looking through how China's Ecological Civilization system is positioned in the pre-established theoretical spectrum under realistic circumstances. According to Priority Projects for Environmental Protection of the Thirteenth Five-Year Plan, there were six priority projects, half of them focused on emission management (State Council of PRC, 2016). In Xi Jinping's speech at the 19th National Congress of the Communist Party of China, air pollution was brought about many times as a phenomenal environmental problem (Xi, 2017). In terms of case selection, the Clean Winter Heating Project in Northern China, as one of the most significant air pollution governance projects, can be the most representative one when analyzing the project guided by the Ecological Civilization system.

In 2016, The 14th meeting of China's Central Leading Group for Finance and Economics was held, to discuss major projects that were brought about by the Thirteenth Five-Year Plan. The Clean Winter Heating Project in Northern China was first emphasized as one of the most urgent environmental protection projects (Xinhua News Agency, 2016). The project is a significant initiative under Xi Jinping's leadership, aimed at addressing the severe air pollution problem in Northern China, particularly during the winter heating season. Northern China traditionally relied heavily on coal for winter heating, contributing significantly to air pollution, particularly PM2.5 particles (State Council of PRC, 2013). The pollution worsened

during winter months, impacting public health and quality of life. The primary goal of the Clean Winter Heating project is to reduce reliance on coal and switch to cleaner energy sources for heating purposes (Ministry of Housing and Urban-Rural Development, National Development and Reform Commission, Ministry of Finance and National Energy Administration, 2017). This initiative is part of China's broader efforts to combat air pollution and transition towards cleaner energy.

Starting from sub-central departments' documents as well as local (Beijing, Liaoning, Shaanxi, and Xinjiang) documents, this section will use the characteristics of the ecological civilization system established in the previous section to analyze the extent to which specific environmental projects have inherited the characteristics of the Ecological Civilization system. In other words, the research in this section exemplifies the practical application of implementing Ecological Civilization's directives, reflecting a realistic circumstance for positioning China's Ecological Civilization among the pre-established theoretical spectrum, showcasing the dynamics between national priorities and local execution in the pursuit of environmental sustainability and public health improvement.

### 6.2.1 Characteristics of Sub-Central Departmental Project

After coding and analyzing the documents issued by the sub-central departments regarding Clean Winter Heating, the characteristics with the theory mark under the six benchmarks (the benchmark of 'Global Participation' was not referenced in sub-central sector documents for this project) will be examined and compared with the result of the central document analysis, to arrive at the theoretical positioning of China's Ecological Civilization system in the specific project.

### A. Enforceability

In terms of enforceability, the characteristics of the winter clean heating project shown in the sub-central departments' document and the characteristics of the Ecological Civilization system depicted in the central document are basically in line with each other, which also consists of two parts: 'Centralized Control' and 'Government-Capital Cooperation,' and also sharing the same sub-characteristics (Table 11).

Codes (Characteristics)	Theory	Reference	Source
Enforceability		58	5
A. Centralized Control	amb	35	5
a. Top-Down Management	AE	17	4
b. Financial Support	GS	8	3
c. Environmental Standards Backing	amb	7	2
d. Resource Distribution	GS	1	1
e. Public Opinion Guidance	AE	2	2
B. Government-Capital Cooperation	amb	23	4

Table 11 Codebook of Enforceability from sub-central governmental documents

As seen in the sub-central sectoral documents, this typical authoritarian top-down management model is repeatedly emphasized as with the Ecological Civilization system, one of the sources of enforceability of Clean Winter Heating projects continues to be provided by the top-down model. Specifically, policies are formulated by the central government, the State Council communicates the policy goals to provincial governments, and finally, the goals and tasks are disaggregated and implemented by local people's governments and enterprises (State Council of PRC, 2013; China National Energy Administration (CNEA), 2015; PRC National Development and Reform Commission (NDRC), 2017). Local governments at all levels need to break down and implement the policies issued by their respective higher governments, ultimately achieving enforceability under central control.

According to the results of the analysis of the central documents, central financial support serves as an important Green State vehicle for central control. This is also shown in the sub-central departmental documents and the different types of centralized financial support are described in more detail. In detail, central economic support is divided into two parts, direct financial support, and indirect policy support. The so-called direct financial support refers to the central financial through the central budget,

direct support for local heating clean-up, and the funds directly into all levels of the government budget (Ministry of Housing and Urban-Rural Development, National Development and Reform Commission, Ministry of Finance and National Energy Administration, 2017; PRC National Development and Reform Commission (NDRC), 2017b, 2017a). Indirect policy support refers to the central government directly controlling banks to introduce relevant credit preferential policies to help heating enterprises to finance, to achieve the cleanliness of winter heating.

In terms of resource distribution, as described in the section analyzing the central document, in China the government has the power to allocate all natural resources, including clean heating energy such as natural gas. The sub-central departmental document on clean heating also mentions that the National Energy Administration (NEA) will unify the allocation of natural gas resources, thus providing policy support for "coal-to-gas" conversion (PRC National Development and Reform Commission (NDRC), 2017). This shows that the Ecological Civilization system still has the ability to redistribute resources in the specific projects of the Ecological Civilization system that a Green State should have.

As a characteristic approach of authoritarian policy, public opinion guidance is evident in the documents issued by sub-central authorities. To facilitate public acceptance of the winter clean heating program, the documents recommend that various media outlets be mandated to promote the program and cultivate a positive public opinion climate. This strategy allows the government to facilitate policy implementation to some degree (State Council of PRC, 2013; PRC National Development and Reform Commission (NDRC), 2017). However, excessive control over the media could also result in overlooking the program's shortcomings.

# **B.** Interests Preference

As can be seen from the sub-central sector documents on cleaner winter heating, only national interests are mentioned in terms of interest preference and there is no

information on global ecological protection (see Table 12). Even if clean winter heating projects do contribute to solving global environmental problems to a certain extent, they are not used as a starting point for policy formulation.

Codes (Characteristics)	Theory	Reference	Source
Interests Preference		11	4
A. For Home State	amb	11	4
a. People's Welfare	amb	3	3
b. Economic Sustainability	amb	3	3
c. Ecological Security	amb	3	3
d. Continuity of the Party Authority	AE	2	1
e. International Influence	AE	0	0
B. For Global Ecosystem	GS	0	0

Table 12 Codebook of Interests Preference from Sub-central governmental documents

In terms of home-state interests, the main goal of the Clean Winter Heating Project is to address theoretically ambiguous issues like people's welfare, economic sustainability, and ecological security. Since clean winter heating is more of a domestic issue, there is no reference in the relevant sub-central sectoral documents for the interest of increasing international influence.

Since Clean Winter Heating is an important part of the Ecological Civilization system, and since the air problems in the northern cities of China have caused a great deal of public discontent, the implementation of this project implies the effectiveness of the Ecological Civilization system, which represents the fulfillment of the Chinese Communist Party's commitment to the "Chinese Dream". As stated in the document, the winter heating project is related to the realization of the Chinese Dream (State Council of PRC, 2013). Therefore, one of the major profit motives of the Northern Winter Clean Heating project is to maintain the authority of the party.

### C. Transparency

In terms of transparency, the content of the information opening was also mentioned in the sub-central departmental documents of the Clean Winter Heating Project (Table 13).

Codes (Characteristics)	Theory	Reference	Source
Transparency		5	2
A. Information Opening	GS	5	2

Table 13 Codebook of Transparency from Sub-central governmental documents

The documents point out the need to disclose information on the cost of clean energy as a means of ensuring that heating costs are at a reasonable level after the project is implemented and also mention that the selling price of energy is subject to social supervision (PRC National Development and Reform Commission (NDRC), 2017). In addition, it also mentions that information on urban air quality must be made public and that the environmental information of heating companies is required to be made public on a mandatory basis (State Council of PRC, 2013). These specific policies reflect that the Green State characteristic of information transparency has been retained in the specific projects under the Ecological Civilization system.

## **D.** Accountability

As can be seen from the sub-central department documents for the Winter Heating Project, which is almost identical to the accountability characteristics of the Ecological Civilization system, both consist of "Top-Down Supervision" and "Multistakeholder Involvement" (see Table 14).

Codes (Characteristics)	Theory	Reference	Source
Accountability		25	6
A. Top-Down Supervision	AE	20	5
a. Performance Supervision and Evaluation	AE	15	4
b. Bottom-Up Responsibility Tracing	AE	5	2
B. Multistakeholder Involvement	GS	5	4

Table 14 Codebook of Accountability from Sub-central governmental documents

The analysis of the document reveals that the accountability of sub-central departments largely arises from top-down supervision that characterizes authoritarianism. Specifically, the document mandates provincial departments to establish and enforce a supervision system. Regional governments (departments) are required to undergo regular reviews by provincial governments (departments)

regarding the implementation of Clean Winter Heating policies (PRC National Development and Reform Commission (NDRC), 2017). Additionally, the State Council is tasked with setting performance assessment indicators for Clean Winter Heating, which are then disseminated to and implemented by provincial governments (departments). The responsibility for reviewing these performance assessments rests with the respective higher-level governments (departments) (State Council of PRC, 2013). The document also reflects the concept of bottom-up responsibility tracing, a crucial aspect of top-down accountability. For instance, it establishes special central environmental protection inspections. Those who fail to effectively fulfill the assigned tasks and objectives will be held accountable upwards, in accordance with legal stipulations (State Council of PRC, 2013; PRC Ministry of Environmental Protection (MEP), 2017).

In the Winter Clean Heating Project, accountability is not only found within the government, but like ecological civilization, it also has accountability under multistakeholder participation. The document indicates that multi-stakeholder participation primarily occurs in the supervision of heat supply prices. For example, it discusses the implementation of heat supply cost information disclosure and the enhancement of social supervision to rationalize heat supply prices (PRC National Development and Reform Commission (NDRC), 2017a, 2017b). Additionally, the document mentions media participation; although not extensively covered, one sub-central departmental document notes that during local heating inspections, the Ministry of Environmental Protection "arranged" for 11 media journalists to accompany inspectors for interviews and reports (PRC Ministry of Environmental Protection (MEP), 2017). The credibility of the "arranged" media cannot be verified here, as genuine multi-stakeholder participation for accountability would not require the government to specifically arrange for certain media outlets to report on the winter clean heating policy. Overall, the documents suggest that multi-stakeholder accountability is present, aligning with the Green State theory of accountability.

# E. Legitimacy

As with the source of legitimacy of the Ecological Civilization system, it can be seen from the sub-central departmental documents on the Clean Winter Heating Project that the legitimacy of the project also derives from the core value system of the Party Central Committee as well as from the laws and regulations set by the central government. As explained in the section on the analysis of the central documents, both sources of legitimacy originally derive from the typical authoritarian source of legitimacy, which is the effectiveness of government performance (Lian and Li, 2024).

Codes (Characteristics)	Theory	Reference	Source
Legitimacy		15	6
A. Core Values from the Party Central	AE	10	6
B. Law & Regulation-Making from the Central	AE	5	3

Table 15 Codebook of Legitimacy from Sub-central governmental documents

In sub-central departmental documents on clean winter heating projects, in addition to referring to the general guiding standards of former Communist Party leaders such as Deng Xiaoping's Theory, the Three Represents Thought, and the Scientific Outlook on Development (State Council of PRC, 2013), there are also numerous references to Xi Jinping's policy request at the 14th meeting of the Central Financial and Economic Leadership Group (CFEG) for a clean winter heating project, which states that "the project should be implemented in accordance with the guidelines of enterprise-oriented, government-promoted, and affordable to the residents (Xinhua News Agency, 2016; Ministry of Housing and Urban-Rural Development, National Development and Reform Commission, Ministry of Finance and National Energy Administration, 2017; PRC National Development and Reform Commission (NDRC), 2017b, 2017a)."

Sub-central departments, tasked with developing specific projects for the Party Central Committee's Ecological Civilization system, derive their legitimacy from the core values and regulations of the Party Central Committee and, in turn, confer legitimacy to lower levels of government (departments). Documents issued by sub-

central departments such as the National Development and Reform Commission (NDRC) and the National Energy Administration (NEA) guide the formulation of specific policies at lower levels, including the rationalization of heating prices and the adoption of market-based trading mechanisms, etc (PRC National Development and Reform Commission (NDRC), 2017; China National Energy Administration (CNEA), 2019). This guidance not only lends legitimacy to the policies crafted by lower-level governments but also confirms the downward transmission of governmental legitimacy.

# 6.2.2 Positioning of China's Ecological Civilization -- From Project Design

After analyzing the sub-central departmental documents on Clean Winter Heating, as in the previous section, a proportion table was created to show the extent to which the Ecological Civilization blueprint exhibits theoretical consistency across a predetermined theoretical spectrum when implemented into specific projects (Table 16, the values in parentheses are the results of the analysis of the central documents in the previous section, as shown in Table 10). In other words, by analyzing where the characteristics of specific projects under the Ecological Civilization system fit under the predefined theoretical spectrum, it is possible to derive the extent to which the

	Enforeceability	Interests Preference	Transparency	Global Engagement	Accountability	Legitimacy	Total	GS/AE
Green State [GS]	12.5% (16.67%)	0% (6.45%)	71.43% (100%)	0% (0%)	17.24% (26.47%)	5.88% (4.76%)	15% (16.67%)	15% / 40.71%
Authoritarian Environmentalism [AE]	26.25% (30%)	28.57% (22.58%)	14.29% (0%)	0% (100%)	65.52% (55.88%)	82.35% (85.71%)	40.71% (43.59%)	= 0.37 (0.38)

Table 16 The proportions of two theories under six benchmarks from sub-central documents

characteristics of the Ecological Civilization system can be inherited by specific projects, thus obtaining a more practical theoretical position of the Ecological Civilization system.

As can be seen from the data in the table, although the proportion of the two theories under each benchmark varies (e.g., Winter Clean heating as an environmental project that focuses more on domestic livelihood issues, it leads to a lack of attention to global environmental justice in terms of interest preferences and does not involve information about global participation, either), overall, when the Ecological Civilization system is implemented into specific projects, the ratio of the proportions of the two theories did not change significantly (from 0.38 to 0.37). This finding suggests that the characteristics of the Ecological Civilization system can be effectively maintained in the environmental projects it oversees. In other words, the Ecological Civilization system retains its ideal theoretical position within the pre-established theoretical spectrum when applied to specific environmental projects.

#### **6.2.3 Characteristics of Provincial Policies**

After analyzing the project design aspects of the Clean Winter Heating Project, it is necessary to further analyze the specific policy documents of this project at the provincial level in order to test to what extent the theoretical positioning of environmental projects under the Ecological Civilization system in the sub-central sectoral design process coincides with that of the provincial policy formulation process.

According to what was presented in the methodology section, for the selection of the northern provinces of China, Beijing, Liaoning, Shaanxi, and Xinjiang were selected as case studies for this study, and the policy documents related to clean winter heating in these four provinces were coded and analyzed in the same way as before. The table below shows the coding result of provincial policy characteristics under the six predefined benchmarks (the benchmark 'Global Engagement,' which was not mentioned in the provincial documents, was removed from the table, Table 17).

The centralized, top-down management model remains for enforceability, with provincial governments setting targets for municipalities and requiring implementation across all government levels, departments, and enterprises (Beijing Municipal People's Government, 2013; Liaoning Provincial People's Government, 2017; People's Government of Shaanxi Province, 2018). Provincial governments have set more

specific financial subsidy policies to expedite the Clean Winter Heating Project, in line with sub-central departmental policies. Provincial documents also outline specific guidelines for resource allocation, enabling the unified distribution of clean energy like natural gas. Public opinion is centrally guided by promoting the program through various media outlets, fostering a favorable grassroots perception.

Codes (Characteristics)	Theory	Reference	Source
Enforceability		32	4
A. Centralized Control	amb	23	4
a. Top-Down Management	AE	11	4
b. Financial Support	GS	6	4
c. Environmental Standards Backing	amb	0	0
d. Resource Distribution	GS	2	2
e. Public Opinion Guidance	AE	4	4
B. Government-Capital Cooperation	amb	9	4
Interests Preference		5	2
A. For Home State	amb	5	2
a. People's Welfare	amb	1	1
b. Economic Sustainability	amb	1	
c. Ecological Security	amb	2	2
d. Continuity of the Party Authority	AE	1	1
e. International Influence	AE	0	(
B. For Global Ecosystem	GS	0	(
Transparency		2	1
A. Information Opening	GS	2	1
Accountability		23	2
A. Top-Down Supervision	AE	20	4
a. Performance Supervision and Evaluation	AE	17	2
b. Bottom-Up Responsibility Tracing	AE	3	
B. Multistakeholder Involvement	GS	3	1
Legitimacy		8	3
A. Core Values from the Party Central	AE	5	3
B. Law & Regulation-Making from the Central	AE	3	

Table 17 Codebook from the provincial documents

As the Clean Winter Heating Project is more concerned with domestic livelihoods and the environment, like the sub-central sector, most of the references in the provincial government documents are characterized by vague theoretical positioning of interest preferences, and there is no mention of a concern for international influence and global ecosystem, and matters related to global engagement. There is also little mention of the interest in the continuity of party authority, probably because the provincial governments do not undertake this function, but rather implement the projects of the central and sub-central authorities.

There is little information on transparency and social monitoring in provincial government documents. It is only mentioned in the Xinjiang Uygur Autonomous Region's document on Clean Winter Heating, which requires the people's governments of all cities to regularly publicize the air quality situation in their districts and open it up to social supervision (People's Government of Xinjiang Uygur Autonomous Region, 2014).

In terms of accountability, provincial governments have almost fully complied with the requirements of the sub-central departments, which include top-down internal oversight as well as multi-stakeholder participation. As with accountability, it is clear from provincial government documents that the characterization in terms of legitimacy is also derived from the sub-central departments, i.e., from the core value of the party central and the laws and regulations formulated by the Central Government.

# 6.2.4 Positioning of China's Ecological Civilization-- From Provincial Policy-Making

As in the previous section, a proportion table was also created to reflect the extent to which the Ecological Civilization blueprint exhibited theoretical consistency across a pre-determined theoretical spectrum as it moved from sub-central departmental project design to provincial government policy development, based on a coded analysis of provincial documents (Table 18, the values in parentheses are the results of the analysis of the sub-central departmental documents in the previous section, as shown in Table 16).

	Enforeceability	Interests Preference	Transparency	Global Engagement	Accountability	Legitimacy	Total	GS/AE
Green State [GS]	16.36% (12.5%)	0% (0%)	66.67% (71.43%)	0% (0%)	16% (17.24%)	0% (5.88%)	15.62% (15%)	15.62%
Authoritarian Environmentalism [AE]	27.27% (26.25%)	25% (28.57%)	33.33% (14.29%)	0% (0%)	76% (65.52%)	77.78% (82.35%)	44.79% (40.71%)	44.79% = 0.35 (0.37)

Table 18 The proportions of two theories under six benchmarks from provincial documents

As can be seen from the table of proportions, when the provincial governments implemented the environmental projects designed by the sub-central sector, the ratio of the proportions of the two theories changed (from 0.37 to 0.35). The change in the proportions of each of the two theories across benchmarks shows that the proportion of the Green State theory has decreased under several benchmarks, except for an increase in 'Enforceability'. This is because in terms of enforceability, since the provincial policy documents have made detailed policies on the 'Financial Support' aspect, and as one of the most important drivers of the Clean Winter Heating program, the part about 'Financial Support' naturally accounts for a high percentage of the documents, which also leads to an increase in the total proportion of the Green State theory (from 15% to 15.62%), even though the proportion of the Green State Theory decreases under several other benchmarks.

In terms of the share of Authoritarian Environmentalism across benchmarks, the most significant changes were in 'Transparency' (from 14.29% to 33.33%) and 'Accountability' (from 65.52% to 76%). The increase in the proportion of Authoritarian Environmentalism can be explained by the fact that provincial government documents contain less information about environmental information disclosure and multi-stakeholder participation in supervision, which characterize the Green State. Thus ultimately leading to a little change in the ratio of the two theories. The reason for this change may lie in the fact that local governments may be more sensitive to environmental information due to performance pressures, as will be unfolded in the analysis of the interviews in the next section. Overall, the ratios of the two theories in the provincial documents are in broad conformity with the results

presented in their sub-central departmental project design documents. In other words, when specific environmental projects are implemented by local governments, the Ecological Civilization system changes somewhat within the predefined theoretical spectrum but basically has not yet deviated much from its ideal theoretical position.

#### **6.2.5** Characteristics of Policy Implementation

After analyzing the government documents, to further explore the theoretical positioning of the Ecological Civilization system between the Green State and Authoritarian Environmentalism, this section will evaluate the implementation level of the Clean Winter Heating Project through interviews with government officials, employees of heating companies, and the public. In this way, this paper completes a closed-loop study of the theoretical positioning of the Ecological Civilization system from the central government to the project, to the local level, and to the implementation.

In this study, due to time and networking constraints, there was no way to conduct a large enough number of interviews, and because there were not enough interviewees to ensure that the proportion data were sufficiently credible, there was no way to create proportion tables for the interviewed documents as there were for the governmental documents (e.g., Tables 10, 16, and 18) to illustrate specific theoretical percentage of Ecological Civilization system in the stages of implementation. Therefore, this study designed a series of interview questions based on the characteristics of Ecological Civilization under the six benchmarks (Appendix 3), and by analyzing the information about the theoretical positioning of the Ecological Civilization system in the results of the interviews, it will serve as a further refinement of the theoretical positioning of Ecological Civilization derived from the analysis of government documents.

Interviews with government officials yielded some information on enforceability and legitimacy. The officials pointed out that the policies formulated by the provincial governments are based on the project outlines formulated by the sub-central departments, and then the local governments use the provincial policy documents as the principles to formulate the relevant policies at all levels of the localities. However, there is still a certain degree of flexibility in the formulation of policies by local governments at all levels. "Local policies can be formulated according to local conditions without violating the basic principles of the policies of higher levels, but when it comes to the formulation of any environmental standards, the standards formulated by the lower levels of government must be stricter than those of the central government" says BO. This viewpoint also verifies that the legitimacy of the lower government's policies comes from the laws or regulations formulated by the higher government or even the central government. Overall, this authoritarian top-down government management model provides the main enforceability for Ecological Civilization in China.

In terms of financial support, provincial officials interviewed noted that the central government provided financial funding for the Clean Winter Heating Project, which was key to implementing policies rapidly. Officials from the Environmental Protection Bureau in Liaoning Province (LO) said that the central government provides financial support based on provincial government budgets for Clean Winter Heating Project implementation, and then the provincial government continues to allocate funds downward based on the budget statements of local governments at lower levels. According to an employee of a heating company in Xinjiang (XS), the company only needs to pay for the cost of the upgrade and report the amount spent to the local government after implementation, which will reimburse it. In terms of resource distribution, not much information was available because the officials interviewed were from provincial EPBs and were not responsible for natural resource allocation. According to officials from the Xinjiang Environmental Protection Bureau (XO), the Energy Bureau is primarily responsible for natural resource distribution, particularly for natural gas, but it works with the Environmental Protection Bureau to develop a model for allocating natural gas in each region to avoid instability of heating in a

particular area due to unequal distribution of energy. Thus, in terms of both financial support and resource distribution, China's Ecological Civilization system is able to meet the Green State theory's requirements for a 'strong' and effective state (Eckersley, 2004).

Public opinion guidance as one of the important channels for China's Ecological Civilization system to gain enforceability was also confirmed by interviews with government officials. "Publicity for the Clean Winter Heating Project is accompanied by the process of implementing the project," said an official (SO) from the Shaanxi Provincial Environmental Protection Bureau. It can thus be shown to some extent that under China's Ecological Civilization system, people's consent is rarely sought before environmental projects are implemented, but rather in such a way that publicity is carried out as they are implemented. In addition to publicizing through the media, schools are another important publicity channel. Every public school in China has a so-called "party office", which serves as a propaganda function for CCP's policies. When the provincial government publicizes the Clean Winter Heating policies, the XO added that it sends the task of publicizing the policies to both media and the party offices of the schools and asks them to shape a positive policy opinion so as to achieve public opinion guidance.

In terms of interest preferences and global engagement, as with the results of the previous analysis of documents on project designing and provincial policy-making, the Clean Winter Heating Project is barely related to issues of increasing international influence and protection of the global ecosystem, as it is a project to address domestic environmental issues. Also, when asked whether the program involves international cooperation or assistance, officials gave vague answers such as "I don't know much about it" or "I don't think I have heard of it."

In terms of transparency, the answers given by the three groups interviewed differed slightly. As far as government officials are concerned, they explained that the

disclosure of government policies to the public referred to in the document is not full disclosure, but rather, according to the specific requirements of higher levels of government, disclosure is made of certain selected policy documents, especially those that may affect the daily lives of the public, such as the reconstruction of underground heating pipelines, and so on. However, the right to interpret this selection criteria remains within the government. At the company level, three of the heating company employees (LS, SS, and XS) interviewed addressed that their emissions information is not directly publicized to the public, but rather reported to the government supervision departments and publicized by the government, which further undermines the transparency of government. The situation is even worse when interviewing members of the public, none of the respondents indicated that they knew where to look for information on government policies and environmental monitoring, even if such platforms did exist (e.g., social media such as WeChat, Weibo, and government websites). According to the respondent in Liaoning, "We don't really know where to look for this information," says LR.

In terms of accountability, the situation is generally consistent with what is described in official documents. As described by government officials, provincial governments are responsible for conducting performance evaluations of the implementation of policies at the lowest levels of government, and this supervision process is top-down, with provincial governments also under the supervision of the central government. In addition, all levels of government are monitored by the supervision of Environmental Inspection Teams that are directly led by the central government, as mentioned by BO. In case of serious environmental problems, the Central Environmental Inspection team will trace the responsibility of the regional government officials back to the highest government official in charge of the region, which to a certain extent avoids the problem of corruption caused by collusion between local governments and enterprises, just as SO emphasized. In terms of multistakeholder participation, according to government officials, the government has

complaint channels for the public to complain about environmental policies or conditions they are dissatisfied with, and this was recognized by the public respondents, including an interviewee, BR, who reported air quality problems years before and received a positive response from the government after the report was made. The interviewee was notified that the government has penalized the non-compliant enterprises in the vicinity of the respondent's place of residence and the air quality problem was solved.

The 12 interviewees commented positively on the implementation of the Winter Clean Heating Project, but some public interviewees said that although they knew little about the project, they noticed an increase in the number of sunny days in winter and a significant reduction in haze after the project's implementation. Overall, the implementation of the Clean Winter Heating Project in the North under China's Ecological Civilization system has been relatively successful, but the theoretical positioning of the Ecological Civilization system has undergone some slight changes in the process of moving from provincial policy to concrete implementation, a change caused mainly by a decline in transparency, the decline that may move the theoretical positioning of the Ecological Civilization system slightly away from the Green State end of the spectrum.

# 6.3 Conclusion of the Positioning of China's Ecological Civilization

As the analysis of the interview material concludes, the characteristics of China's Ecological Civilization system and its positioning within the theoretical spectrum from 'Green State' to 'Authoritarian Environmentalism' become apparent. Throughout various stages—ranging from the central government's development of the Ecological Civilization blueprint, through sub-central departments' design of environmental projects, to provincial governments' policy formulations and the final project implementations—it is evident that China's approach does not strictly adhere to an

authoritarian environmentalist mode of governance, even if it still occupies a large part of it. In fact, several system characteristics reflect Green State ideology elements.

Drawing from the findings in the previous section, which include the ratios of Green State to Authoritarian Environmentalism theories at each stage of implementation (converted to scores for easier mapping as shown in Table 19), and the analysis of the interview content, we can delineate the theoretical positioning of China's Ecological Civilization system at various stages of its implementation (as depicted in Figure 2).

	Central	Sub-Central	Provincial	Implementation
GS/AE	0.38 ≈ 28% / 72%	0.37 ≈ 27% / 73%	0.35 ≈ 26% / 74%	Slightly lower than 26% / 74%

Table 19 Ratios of two theories in each stage

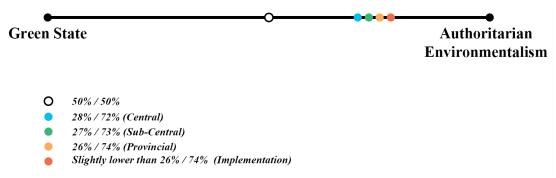


Figure 2 Ecological Civilization's theoretical positionings

Combining insights from before with data from Figure 3, we observe a slight shift in the positioning of China's Ecological Civilization system within the predefined theoretical spectrum across different stages. Notably, the system tends to exhibit more authoritarian environmentalist characteristics as governance moves to lower levels. This trend, as detailed in the analysis section, is primarily attributed to a reduction in Green State attributes, particularly under the benchmarks of 'transparency' and 'accountability'. Interviews with officials shed light on potential reasons for this decline, with several indicating that the government's hesitance to release policy and

environmental information stems from concerns over potential environmental liabilities and the desire not to adversely affect government performance assessments.

Despite a decline in the influence of Green State theory due to issues with transparency and accountability, it still represents approximately 25% to 28% of the characteristics in China's Ecological Civilization system, according to the data and theoretical spectrum. These Green State characteristics are predominantly seen in the state's capability to implement policies. As Eckersley notes, a Green State is defined by its ability to effectively utilize regulatory and fiscal mechanisms and to reallocate resources towards eco-friendly policies (Eckersley, 2004). On the other hand, authoritarian elements constitute the majority of the spectrum, around 72% to 75%. This predominance is reflected in China's top-down management and supervision system, which, while enhancing governmental efficiency and ensuring effective policy implementation, may also suppress the voices of other stakeholders, such as the public and non-governmental organizations, due to its centralized control over public opinion.

## 7 Conclusion

In sum, this thesis describes the dynamic positioning of China's Ecological Civilization between the "Green State" and "Authoritarian Environmentalism." The system blends these two models, with strong central control and limited public participation typical of Authoritarian Environmentalism, as well as elements of the Green State that emphasize sustainable development and ecological responsibility. Analysis of interview materials and policy documents suggests that while the Ecological Civilization system incorporates aspects of both governance models, there are certain differences across administrative levels.

This thesis finds that China's Ecological Civilization system primarily exhibits characteristics of Authoritarian Environmentalism, especially at lower governance levels. This is largely due to the reduction of Green State characteristics such as 'transparency' and 'accountability'. Nonetheless, the Green State characteristics remain notable, as evidenced by the effective use of regulatory and fiscal mechanisms to pursue eco-friendly policies. However, the system's top-down management and control of public opinion, while effective, limits the participation of a wider range of stakeholders.

There are several limitations to this study that need to be considered. The scope and depth of the analysis were limited by the limited number of interviews due to limited access and time, which may have affected the accuracy of the findings. This study relied heavily on Eckersley's Green State theory; the inclusion of different academic perspectives could have enriched the theoretical framework and broadened the scope of interpretation. In addition, the selected cases largely excluded discussions on global engagement, which may influence the results to some extent.

Going forward, expanding the scope of the study, and integrating more comprehensive data will help build on this foundation to further explore the effectiveness of China's Ecological Civilization system. This will further deepen the understanding of China's unique hybrid governance model. The evolution of Ecological Civilization in China provides valuable insights into the interplay between authoritarian control and ecological sustainability that warrant further academic exploration and practical assessment.

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# 9 Appendix

## 9.1 Appendix 1: Documents' Titles

#### **Central Documents' Titles:**

- 1. Report of Hu Jintao at the 18th National Congress of the Communist Party of China—[Chapter 8] (2012.11.17)
- 2. Communiqué of the Third Plenary Session of the 18th Central Committee of the Communist Party of China (2013.11.12)
- 3. Opinions of the Central Committee of the Communist Party of China and the State Council on Accelerating the Construction of Ecological Civilization (2015.04.25)
- 4. Outline of the Thirteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China (2016-2020)— [Chapter 10] (2016.03.17)
- 5. Xi Jinping: Successfully building a moderately prosperous society in all aspects and seizing the great victory of socialism with Chinese characteristics in the new era Report at the 19th National Congress of the Communist Party of China (CCP)—[Chapter 9] (2017.10.18)
- 6. Outline of the Fourteenth Five-Year Plan for the National Economic and Social Development of the People's Republic of China and the Vision 2035—[Chapter 11] (2021.03.12)

#### **Sub-Central Documents' Titles:**

- 1. Air Pollution Prevention and Control Action Plan\_ State Council of PRC (2013.09.10)
- 2. Notice on the Work on Cleaner Heating by Wind Power\_ China National Energy Administration (CNEA) (2015.06.05)
- 3. Report of the fourteenth meeting of the Central Leading Group on Finance and Economy (2016.12.21)
- 4. Guidelines for Promoting Clean Heating in Cities and Towns in Northern Heating Regions\_ Ministry of Housing and Urban-Rural Development, National Development and Reform Commission, Ministry of Finance and National Energy Administration (2017.09.06)
- 5. Advice on Pricing Policies for Clean Heating in Northern Areas\_ PRC National Development and Reform Commission (NDRC) (2017.09.25)
- 6. Planning for Clean Winter Heating in the Northern Areas of China (2017-2021)\_ PRC National Development and Reform Commission (NDRC) (2017.12)
- 7. Letter from the Ministry of Environmental Protection on the Special Supervision of 2017 Winter Heating Guarantee Work in "2+26" Cities in Beijing-Tianjin-Hebei

- and Surrounding Areas\_ PRC Ministry of Environmental Protection (MEP) (2017.12.17)
- 8. Letter from the Comprehensive Department of the National Energy Administration requesting opinions on the Notice on Solving Relevant Problems in the Promotion of Clean Heating from "Coal to Gas" and "Coal to Electricity"\_ China National Energy Administration (CNEA) (2019.07.04)
- 9. National Energy Administration's notice in renewable energy heating according to local conditions\_ China National Energy Administration (CNEA) (2021.01.27)

#### **Provincial Documents' Titles:**

- 1. Notice of Beijing Municipality's 2013-2017 Work Program for Accelerating Coal Reduction and Clean Energy Development\_ Beijing Municipal People's Government (2013.08.23)
- 2. Liaoning Provincial People's Government General Office on Issuance of Liaoning Provincial Three-Year Rolling Plan for Promoting Clean Heating (2018-2020)\_ Liaoning Provincial People's Government (2017.10.21)
- 3. Shaanxi Province Clean Winter Heating Implementation Program (2017-2021)\_ People's Government of Shaanxi Province (2018.06.13)
- 4. Xinjiang Uygur Autonomous Region Air Pollution Prevention and Control Action Plan Implementation Program\_ People's Government of Xinjiang Uygur Autonomous Region (2014.04.17)

# 9.2 Appendix 2: Consent to Participate in a Master Thesis at the Faculty of Social Sciences

I agree to participate in the interview for Jiuyang Li's master's thesis at Lund University, Another Way to Green: China's 'Ecological Civilization' Approach to Environmental Governance.

[This project is for investigating the theory position of China's Ecological Civilization, and the interview will be used as a support material for analyzing the case (Clean Winter Heating Project in Northern China) under the Ecological Civilization system. In this interview, some questions about the Clean Winter Heating Project will be asked, and any personal information will not be collected and included.]

## The following personal data will be processed:

No personal data will be processed and strict measures were implemented to safeguard the confidentiality and anonymity of participants' data. Personal identifiers were removed or altered in the analysis and reporting stages to prevent the disclosure of individual identities. All interviews are assigned a code without any personal information. These precautions extended to the handling of translated interview transcripts, ensuring that translation processes did not compromise participant privacy.

Personal data will be processed in the following ways:

The interview data such as records and video will be used for the thesis writing and only stored on my computer and only for personal use for 1 month before I delete it. Any interview data will not be shared and the research result will be only shared with Lund University.

We do not share your personal data with third parties.

Lund University, Box 117, 221 00 Lund, Sweden, with organization number 202100-3211 is the controller. You can find Lund University's privacy policy at www.lu.se/integritet

You have the right to receive information about the personal data we process about you. You also have the right to have inaccurate personal data about you corrected. If you have a complaint about our processing of your personal data, you can contact our Data Protection Officer at dataskyddsombud@lu.se. You also have the right to lodge a complaint with the supervisory authority (the Data Protection Authority, IMY) if you believe that we are processing your personal data incorrectly.

#### Consent

I have read the above information, and any questions I asked have been answered to my satisfaction. I agree to participate in this study-- Another Way to Green: China's 'Ecological Civilization' Approach to Environmental Governance voluntarily, knowing that I can withdraw at any time.

I have been given a copy of this consent form.

Signature:

Date:

## 9.3 Appendix 3: Interview Questions

#### For Government Officials:

- 1. What do you think is the significance of clean heating projects?
- 2. State what you think are the benefits of the clean heating program and what has been achieved.
- 3. Is the local policy on clean heating in winter based entirely on central documents? Or to what extend does it have some local autonomy?
- 4. After the policy is formulated in the region, will it be transferred to the sub-governments for implementation, or will the sub-governments implement it after making further locally appropriate changes to the existing policy?

- 5. Will the policy be publicized before it is formally implemented?
- 6. For the implementation of clean heating, does the central government allocate funds to heating companies to support the renovation of their heating facilities?
- 7. Are there specific incentives and penalties for heating companies to promote the implementation of the program?
- 8. In addition to the central government's financial support, is there any financing through cooperation with enterprises or social capital?
- 9. What channels are used to promote the idea of ecological civilization? What are the ways of promotion?
- 10. In terms of supervision, are government targets set in accordance with the requirements of the central government, and is there mandatory supervision of relevant enterprises?
- 11. For public monitoring, will air test data be made public? Will heating companies be required to disclose their emission data?
- 12. Are there channels for the public to express their comments and suggestions about the policies or their ineffective implementation, and will the government respond to them?
- 13. Are the local efforts connected to international cooperation in providing energy or technology for clean heating projects? Or has this advanced technology been supported by other countries overseas?
- 14. Will there be any upward mobilization of responsibility for those who failed to supervise the project (especially government officials)?
- 15. Do you think this program is truly effective at the governmental level?

### For Heating Company Staffs:

- 1. What do you think is the significance of clean heating?
- 2. Has the implementation of the clean heating reform put pressure on business development?
- 3. Since the clean heating program was reached under the cooperation between the government and the enterprises, was the position of the enterprises in the cooperation process more like an implementer or a participant, in other words, could the enterprises participate in the formulation of the relevant specific policies by the government?
- 4. In the process of implementing clean heating, is it mandatory to send emission data back to the government, and do the enterprises have their own internal environmental emission standards?
- 5. Will the relevant monitoring data be released to the public?
- 6. Does the government provide relevant economic support to the enterprise? Besides the government, is there any social capital to support it?
- 7. Do you think the project has been effectively implemented on the enterprise side?

#### For the Public:

1. Are you aware of the clean heating program? From which sources did you get this information?

- 2. What do you think has changed before and after the implementation of the clean heating program?
- 3. Are you aware of monitoring information published by the government and enterprises? (If there is a positive answer from the government and enterprises on this)
- 4. Do you have a channel to give upward feedback on environmental pollution in case of hazy weather in winter? If so, would you give feedback? Why?
- 5. What is your attitude towards the clean heating program? Do you think it is effective?