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China's Developmentalist Approach to Climate Governance

Mingzhe Zhu^(*)

ABSTRACT

China has adopted a 'developmentalist approach' to climate governance. It entrusts the power of making and implementing climate policy to the governmental ministries and departments that administer industrial affairs, and allows them to achieve climate goals by using macroeconomic measures to transform the structure of industries and energies. This is reflected by the legal framework of climate governance in China. Traces of this approach can be found even at the genesis of this country's climate diplomacy and policy during the preparations for the United Nations conferences of 1988 to 1992. The developmentalism of climate governance was further consolidated between the two major institutional reforms of 1998 and 2018. In this period, the National Development and Reform Commission (NDRC) did not only manage the daily operation of the National Leading Group on Climate Change, but also, with other industrial ministries, substantially contributed to the drafting of climate-related law. The developmentalist approach gave birth to a regulatory paradigm of 'governing by planning', which is producing positive outcomes while lacking public participation, transparency, and accountability.

Introduction

On December 20, 2021, His Excellency Cui Tiankai, the former Chinese Ambassador to the United States, delivered the keynote speech to a conference organized by a thinktank affiliated to the Ministry of Foreign Affairs. He began with a remark on climate change:

Climate change issues, on the surface, seems to be nature's challenges. [...] However, if we analyze the issues more profoundly, we shall see that they are actually about the progress of science and technology, the rise and fall of industries, and the adjustment of industrial chains. We must understand that the essence of [global] climate governance is international rivalry as the first move

*towards a new development paradigm, industrial competitiveness in the future, and the evolution of international rules and standards.*¹

As seen through the lens of development, climate governance appears to concern industrial structure, and the design of climate policy can determine the outcomes of international rivalry in development.

The longest-serving Chinese ambassador to the US has exaggerated the originality of his remark. Climate change is a matter of development. This view is regarded as common sense by the general public in China and does not require profound analysis. Though a definition of the ‘developmentalist approach’ is not available, the viewpoint on climate change through the lens of development has some distinctive features. It entails that climate governance is primarily a task of the state organs who are also in charge of economic and industrial development; that climate policies target industrial transformation; and that tackling climate challenges should not hinder economic growth. China’s national programs and action plans are the best manifestation of this developmentalist approach. The very first national program in 2007 identified “to secure economic development” as one of its guidelines.² Almost every annual report on China’s action and policy has emphasized industrial structure adjustment, energy system optimization, and resource conservation. This article tries to explore the significance of this developmentalist approach in climate law and policy.

At the international level, rules related to this ‘common concern of humankind’ are articulated in a tone that is marked by universality.³ However, closer semantic analysis reveals that at least three distinctive perspectives coexist when countries try to address this common concern of humankind. While European countries have tended to understand it as an environmental problem, the US has tended to see it through an economic lens, and many developing countries comprehend climate politics as ‘part of a larger pattern of historical and economic injustices’.⁴ The perspective of a given jurisdiction

* Senior Postdoctoral Fellow, University of Antwerp, 23, Venusstraat, Antwerp, 2000, Belgium; mingzhe.zhu@uantwerpen.be, ORCID: 0000-0003-3986-0027. This research is funded by the Research Foundation - Flanders (File number: 76473).

1 崔天凯：《关于中美关系的几点思考》，[Tiankai Cui, ‘Thoughts on China-US Relations’] (20 December 2021) <http://www.uscnpm.com/model_item.html?action=view&table=article&id=26797> Last visit:

2 China’s National Climate Change Program (2007) 23.

3 For instance, though the Paris Agreement (2015) recognizes ‘the specific needs and special circumstances of developing country Parties’ (Paragraph 5, Preamble), it acknowledges that ‘climate change is a common concern of humankind’ (Paragraph 11, Preamble).

4 Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani (eds), *International Climate Change Law* (Oxford University Press 2017) 5.

determines the framing of climate change issues, the allocation of policymaking powers, and the setting of policy goals.⁵ More than this, the dominant perspective can also explain, if not predict, the evolution of legislative or regulatory texts and judicial practice, and therefore, is of interest to legal professionals.

China's mechanism of addressing climate change is an indispensable component of global climate governance, because it exceeds the US as the largest carbon dioxide emitter. Because its emissions per capita reached 7.41 metric tons in 2018,⁶ but also because more than 1.4 billion of its people are exposed to droughts, floods and other adverse climatic events.⁷ In July 2021, a record-breaking flood took some 300 lives in Zhengzhou, a provincial capital and economically developed city in Central China that was once self-praising for its efforts in building a 'sponge city' that could absorb flooding and alleviate water shortage.⁸ Legal scholarship has paid attention to China's climate governance, as research works are available on the general normative framework,⁹ predominance of the executive branch,¹⁰ and climate change litigation;¹¹ but very little, if any, research has been conducted on how policymakers frame climate issues. This article is intended to offer some preliminary observations and thoughts on the perception and framing of climate change in the process of formulation and implementation, and I hope to open further discussions that can fill this research gap. For this purpose, I rely on the existing literature, but privilege publicly available archives and personal experience as a participant in the formulation of several climate policies.

On the basis of archival research, interviews with policymakers at different levels and in different departments, and participatory observation during some meetings of climate policymaking, I argue that

5 See *ibid* 5–10.

6 <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=CN>. Last visit: 2021-11-15.

7 See Yong-Jian Ding and others, 'An Overview of Climate Change Impacts on the Society in China' (2021) 12 *Advances in Climate Change Research* 210; Geoff Mann and Joel Wainwright, *Climate Leviathan*. (Penguin Random House 2018) 48.

8 Caicai Du, Xintong Wang, 'In Depth: China's Sponge City Failings Show the 'Arduous' Task of Adapting to Climate Change' (*Caixin Global*, 9 November 2021) <<https://www.caixinglobal.com/2021-11-09/in-depth-chinas-sponge-city-failings-show-the-arduous-task-of-adapting-to-climate-change-101802504.html>> Last visit: 2021-11-15.

9 Alex L Wang, 'Climate Change Policy and Law in China' in Kevin R Gray, Tarasofsky Richard and Cinnamon Carlarne (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016); Xiangbai He, 'Legal and Policy Pathways of Climate Change Adaptation: Comparative Analysis of the Adaptation Practices in the United States, Australia and China' (2018) 7 *Transnational Environmental Law* 347.

10 Jolene Lin, 'Climate Governance in China: Using the "Iron Hand"' in Benjamin Richardson (ed), *Local Climate Change Law: Environmental Regulation in Cities and Other Localities* (Edward Elgar 2012).

11 Yue Zhao, Shuang Lyu and Zhu Wang, 'Prospects for Climate Change Litigation in China' (2019) 8 *Transnational Environmental Law* 349; Xiangbai He, 'Mitigation and Adaptation through Environmental Impact Assessment Litigation: Rethinking the Prospect of Climate Change Litigation in China' (2021) 10 *Transnational Environmental Law* 413; Mingzhe Zhu, 'The Rule of Climate Policy: How Do Chinese Judges Contribute to Climate Governance without Climate Law?' *Transnational Environmental Law*.

climate change is currently commonly framed and dealt with in China as a development problem. To substantiate this argument, this article first provides a panorama of climate-related law in China. It then turns to the origin of China's climate governance by examining the organs and discourse of the preparation phase of the UNFCCC between 1988 and 1992. The third section turns to the period between 1998 and 2018, when the developmentalist approach was consolidated by the allocation of power within the executive branch. This section also depicts the 'governing by planning' paradigm of climate governance.

1. Climate Related Law in China

Like many jurisdictions, China does not have an overall climate law. The National Administration of Energy (NAE) began to draft the *Energy Law* in 2006, publishing a new draft in 2020 with the ambition of unifying all existing legislation on energy.¹² Still, the National People's Congress (NPC) is only preparing to review the draft in 2022 "to assure national economic security and sustainable development".¹³ To date, the applicable norms mainly concern industrial sectors and are scattered between the *Energy Conservation Law* (1997/2018), *Circular Economy Promotion Law* (2008), *Renewable Energy Law* (2006), *Electric Power Law* (1996/2018), *Clean Production Promotion Law* (2002/2012) and *Atmospheric Pollution Prevention and Control Law (APPCL)*, 1987/2018). These laws define the normative framework within which the various mitigation measures can be carried out, and to a great extent determine the scope of China's climate policy.

Two significant and distinctive features of mitigation in China's industrial sector can be observed from these laws. These features prove that climate issues are only remotely related to environmental law. First, prevention of atmospheric pollution can contribute to the reduction of greenhouse gas (GHG) emissions, but GHGs will not be treated as pollutants. Article 2(2) of the *APPCL* mandates the strengthening of the mechanism that "prevents and controls the atmospheric pollution caused by coal, industries, transport, dust, and agriculture, [...] and simultaneously controls atmospheric pollutants and greenhouse gases such as particles, sulfur dioxide, nitrogen oxide, volatile organic compounds, and ammonia, etc." Although public attitudes toward climate change in China are largely driven by

¹² Law of Energy of the PRC 2020.

¹³ 《法工委发言人介绍2022年立法重点项目》, ['NPC Standing Committee's Legislative Agenda for 2022 is Voted' (17 december 2021)] <http://www.npc.gov.cn/npc/kgfb/202112/38831ab324674aa3841a44fbca95ac0d.shtml> Last visit: 2022-01-01

concerns about air pollution,¹⁴ the literal interpretation of the provision suggests that the law separates air pollutants and GHGs. This separation prohibits attempts to regulating the latter using applicable to the former.

Second, the effectiveness of climate governance depends on the ability and willingness of the executive branch to implement non-binding policies¹⁵, because many of the key provisions contained in the aforementioned bills are masterpieces of ambiguity. For instance, the *APPCL* prescribes by its Article 4 that local governments shall set goals for air quality improvement, monitor the achievement of these goals, and disclose the results of these evaluations; but there is no specific provision to ensure that this will be the case. Likewise, other relevant pieces of legislation broadly delegate to the government the authority to adopt specific measures, such as technological renewal, connection of renewably-generated electricity to the grid, and equipment installation; but no sanction is prescribed in case of inaction.¹⁶ Meanwhile, despite the considerable power to create binding regulatory tools, the central and local governments only enact a vast quantity of action plans, guidelines or roadmaps. In other words, it is very unlikely that ordinary citizens will be able to hold a governmental organ or private enterprise accountable before a court by applying the current rules.

Though it is also true that environmental legislation in China contains many similar provisions that authorize the state authority to regulate, the procedural rules guarantee access to judicial actions by various mechanisms. Despite some barriers, NGOs can sue polluters via public interest litigation.¹⁷ Revisions of the *Civil Procedure Law* (Article 55, para.2) and *Administrative Procedure Law* (*APL*, Article 25) in 2017 granted prosecutors the power to sue wrongdoers, and to sue responsible governmental organs for inaction. The *Civil Code*, promulgated in 2021, extends environmental liability from pollution to ecological degradation (Article 1229) and introduces a mechanism of punitive compensation (Article 1232). These mechanisms are not perfect, but they do exist. In climate governance, the scenario is quite different. Despite the attempts by NGOs to hold a grid company

14 Binbin Wang and Qinnan Zhou, 'Climate Change in the Chinese Mind: An Overview of Public Perceptions at Macro and Micro Levels' (2020) 11 *WIREs Climate Change* 639; Binbin Wang, Yating Shen and Yangyang Jin, 'Measurement of Public Awareness of Climate Change in China: Based on a National Survey with 4,025 Samples' (2017) 15 *Chinese Journal of Population Resources and Environment* 285.

15 He (n 9).

16 Zhu (n 11).

17 Lei Xie and Lu Xu, 'Environmental Public Interest Litigation in China: A Critical Examination' (2021) 10 *Transnational Environmental Law* 441.

accountable for the high curtailment rate of the wind power it produced,¹⁸ none of these channels seem to promise that the abovementioned climate law will be practically implemented.¹⁹

To fully grasp the force of climate law and policy in China, we should perhaps go beyond the paradigm of environmental justice and consider the possibility that climate issues are considered as something other than environmental issues. Or, perhaps it is even better to inquire about the possibility that climate law should not be considered as a sub-branch of environmental law, despite articles on climate law or climate change litigation being published mainly in environmental law journals.

But what are climate issues if they are not environmental?

2. Genesis: from Scientific Certainty to Industrial Considerations (1988-1992)

2.1. Formation of Policymaking Organ and Delegation

“I see in all things that what is perfect is that which is composed of all its parts; and, certainly, the most powerful part is the beginning.”²⁰ So said the eminent Roman jurist Gaius. We also must go back to the genesis of China’s climate governance to answer the question above. Scholars have noted that the Chinese government was preoccupied by the scientific certainty of climate change before the Second World Climate Conference (1990).²¹ The most convincing evidence for this is perhaps the predominant role of the State Meteorological Administration (SMA) as the leading institution in climate governance, which will be discussed in the following paragraphs.²² Without challenging the consensus in scholarship on China’s climate diplomacy, I intend to offer an alternative interpretation: that beneath the preoccupation with scientific certainty lay anxiety about industrial development.

18 自然之友环境研究所诉国家电网宁夏公司案，甘肃省高级人民法院（2018）甘民终679号民事裁定书。[The Friends of Nature Institute v Ningxia State Grid, High Court of Gansu Province (2018)]

19 Different opinion, see He (n 11).

20 Dario Mantovani, ‘Le Juriste « Historien »’, *Les juristes écrivains de la Rome antique: Les œuvres des juristes comme littérature* (Les Belles Lettres 2018).

21 See Ye Qi and Tong Wu, ‘The Politics of Climate Change in China’ (2013) 4 *WIREs Climate Change* 301; 庄贵阳、薄凡、张靖：《中国在全球气候治理中的角色定位与战略选择》，《世界经济与政治》2018年第4期，第4-27页。[Guiyang Zhuang, Fan Bo, and Jing Zhang, ‘China’s Role and Strategic Choice in Global Climate Governance’ (2018) 4 *World Economics and Politics* 4, 27.].

22 Professor Guiyang Zhang even argues that the SMA was the responsible agency in the early stage of climate governance. See 薄凡、庄贵阳：《中国气候变化政策演进及阶段性特征》，《阅江学刊》2018年第6期，第14-24页。[Fan Bo, Guiyang Zhuang, ‘The Evolution and Periodic Characteristics of China’s Climate Change Policies’ (2018) 6 *Yuejiang Academic Journal* 14, 24.]

In the dawn of China's climate governance, relevant issues were indeed within the realm of the State Environmental Protection Commission (SEPC) of the State Council (the central executive branch). However, from 1988 to 1998, this commission was under the presidency of Song Jian (宋健), a mathematician, who was simultaneously the president of the State Science and Technology Commission (SSTC). The archives of the SEPC²³ contain reports and meeting minutes that allow us to understand how high-ranking bureaucrats framed climate change.

The first report related to climate change was submitted on March 17, 1989 by the SMA's Deputy Administrator, Luo Jibin (骆继宾), an experienced meteorologist and diplomat who attended the 1988 Geneva conference which established the IPCC.²⁴ Luo's report covered broad issues, such as the scientific evidence for global warming, its consequences and impacts, GHGs and the ozone layer, international concerns, the formation of the IPCC, and some policy recommendations.

Eleven months after Luo's report, the National Coordination Group on Climate Change (NCGCC) was established to coordinate the actions of different ministries.²⁵ Its Working Group 4 (WG 4) was entrusted with the task of preparing for the upcoming climate conferences, and would play a crucial role in the making of Chinese policy and in the climate negotiations. The composition of WG 4 represents an insight into the developmentalist approach, as it included bureaucrats from the Ministry of Foreign Affairs, the SSTC, the Ministry of Energies, the Ministry of Transport, the Ministry of Agriculture, the Bureau of Forestry, the SMA, the Bureau of Environmental Protection (BEP), and State Oceanic Administration.²⁶ The SMA continued to function as the leading scientific authority on climate change issues, but the establishment of the NCGCC demonstrates that the government was

23 The Secretariat of the State Environmental Protection Commission (ed) *Compilation of Documents of the State Environmental Protection Commission (II)* (China Environmental Science Press 1995), cited henceforth as "CDSEPC (II)". The SEPC has collected, compiled, and published its "documents" at least twice, in 1988 and 1995. These documents include reports, meeting minutes, discourses of eminent figures, various regulations, policy initiatives, explanations, and notices. The Secretariat of the SEPC explains in the preface that these documents are records of China's environmental governance. This collection is incomplete and selective, but as informative and useful as other archives.

24 骆继宾：《关于全球气候变暖问题的汇报》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，中国环境科学出版社1995年版，第59-65页。[Jibin Luo, 'Report on Global Warming' in CDSEPC (II) 59, 65.]

25 Qi and Wu (n 21).

26 国家气候变化协调小组第四工作组：《关于气候变化公约谈判准备情况的汇报》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第256页。[Working Group 4 of the National Climate Change Coordination Group, 'Report on the Preparations for the Negotiation of the Climate Change Convention' in CDSEPC (II) 256.]

aware that climate governance is a political matter and requires coordination between the ministries that administer industrial sectors within a planned economy. Besides, in this period, the BEP was inferior to the ‘industrial ministries’ in the bureaucratic hierarchy, and had fewer staff. For these reasons, it could only play a marginal role within the NCGCC.

In November, 1990, Luo attended the Second World Climate Conference in Geneva. Other members of the Chinese delegation included Zou Jingmeng (邹竞蒙, President of the World Meteorological Organization), Qu Geping (曲格平, Director of the BEP) and Zhong Shukong, (钟述孔, Minister Counsellor, Ministry of Foreign Affairs). After this crucial climate diplomacy meeting, the delegation submitted a report to the State Council and urged the central authority to take preventative measures despite some scientific uncertainties. The report also stated that China would welcome the Ministerial Declaration as it was in accordance with the position of China.²⁷ Just one month after the submission of this report, another delegation was formed to represent China in the Intergovernmental Negotiating Committee for the Framework Convention on Climate Change. The Chief of this delegation was Sun Lin (孙林, Department of Treaty and Law, Ministry of Foreign Affairs), and its two Deputy Chiefs were Luo Jibin and Bai Xianhong (白先宏, Department of Social Development, SSTC).

Indeed, it was largely the scientists that determined the making of China’s early climate policy. Even now, China’s special climate envoy is Xie Zhenhua, who was trained in the late 1970s as a nuclear scientist at the Tsinghua University. The framework of climate governance that we know today is co-produced by two worlds—that of science and that of diplomacy.²⁸ At its early stage, China’s climate diplomacy was perhaps the most extreme variation of this co-production process: the policymakers, such as Song Jian, were often scientists, while their science advisers, such as Luo Jibin, were usually directors of governmental departments. Actually, the marriage between scientific and political authorities in China is not unique to climate change issues. In the context of the late 1980s, a large

27 出席第二次世界气候大会代表团：《出席第二次世界气候大会的报告》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第254页。[Delegation to the Second World Climate Conference, ‘Report on the Second World Climate Conference’, CDSEPC (II) 254.]

28 Stefan Aykut and Amy Dahan, *Gouverner le climat?: Vingt ans de négociations internationales* (Les Presses de Sciences Po 2015).

number of high-ranking officials, known as ‘red engineers’, had received their academic and political training at polytechnical colleges before the outbreak of the Cultural Revolution in 1966.²⁹ Furthermore, vacancies left by retiring wartime heroes were now being filled by ambitious young experts who had the opportunity to attend higher education in the late 1970s. Therefore, the importance of scientists and concerns about scientific certainty only mirrored the mutual penetration between science and politics in the Chinese political context. The next section will explore the language by which these scientist-policymakers discuss climate change.

2.2. Discursive Analysis of a Decisive Meeting

The developmentalist approach is not only demonstrated by the predominance of industrial ministries in WG 4 of the NCGCC, but also by the climate-related discussions at the heart of the SEPC. To illustrate this point, we only need to read the minutes of the meeting of the SEPC on January 15, 1991.

The first report was a standard account of the World Climate Conference. The delegation urged the State Council to take climate change seriously, because China’s economy and society relied on agriculture, which is supplied by land and water resources systems that are vulnerable to climate change.³⁰ The drafters of the report also recommended some technological pathways for emission reduction.³¹ Perhaps more importantly, this report contained the golden rule that persisted through the next three decades of climate governance in China:

Without jeopardizing economic development, we shall gradually increase the shares of hydropower, nuclear power, and other renewables within the energy system, recommend and incentivize energy

29 See Joel Andreas, *Rise of the Red Engineers: The Cultural Revolution and the Origins of China’s New Class* (Stanford University Press 2009). Luo was an example of this generation of technocrats.

30 出席第二次世界气候大会代表团：《出席第二次世界气候大会的报告》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第254-255页。[Delegation to the Second World Climate Conference, ‘Report on the Second World Climate Conference’ in CDSEPC 254, 255.]

31 出席第二次世界气候大会代表团：《出席第二次世界气候大会的报告》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第255页。[Delegation to the Second World Climate Conference, ‘Report on the Second World Climate Conference’ in CDSEPC (II) 255.]

saving, increase energy efficiencies, and promote other reduction measures that work in our country.³²

For the drafters of the report, development would eventually solve climate change problems and, at the same time, set limits on the solutions available. In their view, the state should upgrade its energy structure wisely and avoid hindering the economic dynamics released by the Reform and Opening.

Following the climate conference, the SMA draw attention to the high winter temperature in the Northern regions during the 1980s.³³ After explaining the warm winters with meteorological data, the SMA confessed that it could not confirm the extent to which this trend was anthropogenic.³⁴ The third part of this report analyzed the possible positive and negative impacts of warmer winters on industrial and agricultural production.³⁵ This report helped to substantialize the insights of the international scientific community introduced by the climate conference delegation with local statistics and knowledge, while being more reserved in predicting the long-term adverse impacts. Even in this most scientifically-oriented document, its drafters almost naturally connected natural phenomena to the wealth of the nation.

WG 4 of the NCGCC then reported on preparations for the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change in Washington. It regarded national economic and industrial interests as the most important factors in diplomatic policy: “considering our current

32 出席第二次世界气候大会代表团：《出席第二次世界气候大会的报告》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第256页。[Delegation to the Second World Climate Conference, ‘Report on the Second World Climate Conference’ in CDSEPC (II) 256.]

33 国家气象局：《近十年来我国北方冬季明显变暖》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第279页。[China Meteorological Administration, ‘Obvious Warming Winter in the Northern Regions in the Past Ten Years’ in CDSEPC (II) 279.]

34 国家气象局：《近十年来我国北方冬季明显变暖》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第281页。[China Meteorological Administration, ‘Obvious Warming Winter in the Northern Regions in the Past Ten Years’ in CDSEPC (II) 281.]

35 国家气象局：《近十年来我国北方冬季明显变暖》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第283页。[China Meteorological Administration, ‘Obvious Warming Winter in the Northern Regions in the Past Ten Years’ in CDSEPC (II) 283.]

situation, there is no doubt that the central task is to develop, to which energy sectors are crucial.”³⁶ WG 4 also added that “[the high percentage of coal use] is determined by our resource composition and level of economic development. There is no way for us to change the energy structure, nor to upgrade technologies and facilities.”³⁷

Finally, the leading politician in charge of both environmental governance and scientific progress delivered his concluding remarks after lengthy discussion. He acknowledged the robustness of the analysis of data provided by the SMA, while regretting the underdevelopment of climate change research in China.³⁸ Special instructions were given to two ministries. He requested that the Ministry of Agriculture assess the overall impacts of the warming weather on agricultural productivity, and that the State Maritime Administration locate exactly which parts of Chinese territory would be threatened by the rising seas.³⁹

A disclaimer is needed. The genesis of China’s climate policy certainly cannot be reduced to one specific event or moment. Indeed, this meeting is decisive from many perspectives, for it was at this moment that Song Jian, as the President of the SEPC, set the roadmap for mitigation and adaptation after listening to the reports. However, his roadmap cannot *determine* the evolution of climate policy in China. Instead, the purpose of using the reports and the President’s instruction is to shed light on what the implications of climate change were in their minds at a given historical moment.

It is clear that in the minds of Song Jian and his fellow colleagues, they had to maintain a delicate balance between boosting the economy and addressing climate change. They counted on industrial

36 国家气候变化协调小组第四工作组：《关于气候变化公约谈判准备情况的汇报》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第259页。[Working Group 4 of the National Climate Change Coordination Group, ‘Report on the Preparations for Negotiation of the Climate Change Convention’ in CDSEPC (II) 259.]

37 国家气候变化协调小组第四工作组：《关于气候变化公约谈判准备情况的汇报》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第259页。[Working Group 4 of the National Climate Change Coordination Group, ‘Report on the Preparations for the Negotiation of the Climate Change Convention’ in CDSEPC (II) 259.]

38 《宋健同志在国务院环境保护委员会气候专题会议上的讲话》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第249页。[‘Discourse of Song Jian at the Special Conference on Climate of the Environmental Protection Committee of the State Council’ in CDSEPC (II) 249.]

39 《宋健同志在国务院环境保护委员会气候专题会议上的讲话》，国务院环境保护委员会秘书处编：《国务院环境保护委员会文件汇编（二）》，第259页。[‘Discourse of Song Jian at the Special Conference on Climate of the Environmental Protection Committee of the State Council’ in CDSEPC (II) 259.]

modernization and economic development to produce the technological innovation and financial resources necessary to progress to a more sustainable model of development. In summary, climate change is a curse of development that can be reversed only by further development.

3. Consolidation of the Developmentalist Approach (1998-2018)

3.1. Predominance of the National Development and Reform Commission

In the last few decades, economic reforms in China have given rise to several reforms of the governance structure.⁴⁰ Among these institutional reforms at the heart of the central government, two are especially relevant to the present article: the reform of 1998 that created a new organ of climate governance, and the reform of 2018 that designated the Ministry of Ecology and Environment (MEE) as the ministry responsible for climate governance. I argue that the developmentalist approach was consolidated during this period in which climate governance was in the hands of the governmental branch that administers macroeconomics.

During the institutional reform of the State Council in 1998, the aforementioned NCGCC established in 1990 was substituted by the National Coordination Committee on Climate Change (NCCCC).⁴¹ While the former answered to the SEPC, the latter was affiliated to the State Development Planning Commission (SDPC). In fact, this reform also established the General Agency of Environmental Protection and abolished the SEPC. Another institutional reform in 2003 re-labeled the SDPC under its current and best-known name, the National Development and Reform Commission (NDRC), and empowered the NCCCC to coordinate the actions of 15 ministries. In 2007, as China exceeded the US to become the highest emitter of GHGs, the State Council established the National Leading Group on Climate Change, Energy Conservation and Emissions Reduction. The first Chairperson of the group was the Prime Minister, and the secretariat is located at the NDRC.⁴² Finally, in 2008, the Department of Climate Change was created at the heart of the NDRC, and operated until it was relocated to the

40 See Chenggang Xu, 'The Fundamental Institutions of China's Reforms and Development' (2011) 49 *Journal of Economic Literature* 1076.

41 'White Paper (2008): China's Policies and Actions for Addressing Climate Change' (31 October 2008), <<https://www.fmprc.gov.cn/ce/ceun/eng/xw/t521513.htm>> Last visit: 2022-01-01

42 《国务院关于成立国家应对气候变化及节能减排工作领导小组的通知》（国发[2007]18号） [Notice of the State Council on Establishing the National Leading Group for Climate Change and Energy Conservation and Emission Reduction], See

MEE in the institutional reform of 2018.⁴³ This department is responsible for publishing annual reports on China's policies and actions for addressing climate change.

During the period from 1998 to 2018, the NDRC were *de facto* the agency in charge of the making and implementation of climate policy. Although the Prime Minister chairs the Leading Group, it was the head of the NDRC that ensured the daily functioning of the group. Furthermore, the NDRC has always been a well-established ministry. Its creation can be dated back to the State Planning Commission created in 1952, and it administers a wide range of social and economic domains.⁴⁴ The NDRC has more staff than any other ministry, and hired 1029 civil servants in 2008. In comparison, after substantial extension of the MEE both in terms of power and size it could still only hire 478 civil servants.⁴⁵ Overall, the environmental protection agency, regardless its name, was new and had very limited power.⁴⁶ In terms of creation and implementation of specific climate goals, the environmental protection agency can hardly hope to regulate heavily emitting sectors, such as industry, building, agriculture, and transport; whereas the NDRC can, by deploying its microeconomic planning power.

Two anecdotes reported by an experienced journalist who has been covering climate diplomacy for decades help to illustrate the NDRC's predominance in climate policy and diplomacy. When a German politician met a Minister of Environmental Protection in China and asked him about CO₂ emission issues, the Minister replied: "I take care of CO. CO₂ is a matter for the NDRC."⁴⁷ Also, when a senior diplomat from the Department of Treaty and Law of the Ministry of Foreign Affairs addressed a conference entitled "The Challenge of Cancún and the Response from China", she said that "the challenge for our ministry is to deliver warm meals to the negotiators from the NDRC during the climate conference".⁴⁸

43 The General Agency of Environmental Protection was replaced by the Ministry of Environmental Protection, which was the predecessor of the Ministry of Ecology and Environment, in 2008.

44 In fact, the NDRC is so powerful that even the state-owned media commonly refers it as the "mini State Council".

45 《生态环境部职能配置、内设机构和人员编制规定》(Regulation of the MEE's Function, Structure, and Staffing)

46 朱焱：《气候到底怎么了》，中央编译出版社2017年版，第213页。[Yan Zhu, *Change with Climate*, (Central Compilation & Translation Press 2017) 213]

47 朱焱：《气候到底怎么了》，中央编译出版社2017年版，第212页。[Yan Zhu, *Change with Climate*, (Central Compilation & Translation Press 2017) 212]

48 朱焱：《气候到底怎么了》，中央编译出版社2017年版，第219页。[Yan Zhu, *Change with Climate*, (Central Compilation & Translation Press 2017) 219]

The leading position of the NDRC is reflected in the process of preparing legislative bills related to mitigation. The first draft of the *Energy Conservation Law* was jointly prepared in 1995 by the SDPC and the Commission of Economy and Trade.⁴⁹ The Coal Law was a work of the NDRC. The Environmental Protection and Resources Conservation Committee of the NPC was in charge of preparing some other laws, but the NDRC usually had representatives in the drafting commission. The *Circular Economy Promotion Law* (2008) is an example.⁵⁰

Admittedly, the 2018 reform relocated the Department of Climate Change, which is preparing a draft of the climate law, from the NDRC to the MEE and separated the NAE, which is in charge of drafting the *Energy Law*, as an independent agency; nevertheless, it is almost certain that the influence of the NDRC will continue. The senior members of these two departments, who have the power to set agendas, were initially recruited by and promoted within the NDRC before 2018. In other words, Chinese climate law and policy design will remain, at least in the near future, in the hands of these “developmental state bureaucrats”, most of whom are currently in their 40s.⁵¹

The NDRC is predominant, but is far from the only developmental ministry that is involved in climate governance. Other ministries that are also indispensable in climate governance include the Ministry of Transport, the Ministry of Agriculture and Rural Affairs, the Treasury, the Ministry of Housing and Urban-Rural Development, and the Ministry of Science and Technology. In addition, the Department of Energy Conservation of the Ministry of Industry and Information Technology has enormous policy-making power in energy and industrial sectors. For example, this department can decide which technology shall be prioritized and by which policy instrument. These ministries and departments are all at the level of central government; we have not yet discussed the provincial and local governments. Many other departments or divisions can be added to this list. They form a cluster of developmental-industrial departments that largely determine climate policy.

49 陈锦华：《关于〈中华人民共和国节约能源法（草案）〉的说明》，[Jinhua Chen, ‘Explanation on the Draft Energy Conservation Law of the People’s Republic of China’ (5 May 1995)] <http://www.npc.gov.cn/wxzl/gongbao/2000-12/07/content_5003815.htm> Last visit: 2022-01-01

50 冯之浚：《关于〈中华人民共和国循环经济法（草案）〉的说明》，[Zhijun Feng, ‘Explanation on the Draft Circular Economy Promotion Law of the People’s Republic of China’ (26 August 2007)] <http://www.npc.gov.cn/wxzl/gongbao/2008-12/25/content_1467419.htm> Last visit: 2022-01-01

51 Economists often use the term “developmental state” to discuss states that use economic policies to generate rapid industrialization and economic growth. For the case in China, see John B Knight, ‘China as a Developmental State’ (2014) 37 *The World Economy* 1335.

3.2. Governing by Planning

In another article that discusses the legal techniques employed by Chinese judges in climate litigation, I argued that China's climate governance is marked by a sharp contrast between a lack of legally binding documents on climate change and an abundance of plans.⁵² The second part of this article further argues that industrial legislation that has potential value for mitigation can hardly serve as the legal ground for judicial decisions without referring to other provisions. With the exception of two provincial regulations, the executive branch has hesitated to issue restrictive or compulsive texts which have legal effects on citizens' rights and duties.⁵³ Rather, it has enacted a considerable number of national and local action plans, including the National Climate Change Program (2007), the Work Plan for Controlling Greenhouse Gas Emissions during the 12th Five-Year Plan Period, the Comprehensive Work Plan for Energy Conservation and Emission Reduction for the 12th Five-Year Plan Period, the 12th Five-Year Plan for Energy Conservation and Emission Reduction, the 2014–2015 Action Plan for Energy Conservation, Emission Reduction and Low-Carbon Development, and the National Plan on Climate Change (2014–2020).⁵⁴ Indeed, the Chinese government is determined to govern the climate by plans.

I think that this 'governing by planning' paradigm can be considered to be a result of the developmentalist approach. As long as a developmental state can make macroeconomic policy that directly determines the fate of an entire industry and its employees,⁵⁵ it can also use the same powers and measures to boost climate-friendly sectors or transform the energy structure of the hard-to-abate sectors. After all, Article 89 (6) of the Constitution grants the State Council the power to "direct and administer economic affairs and urban and rural development". In addition to the "plan for national economic and social development" that will be examined and approved by the NPC, as provided for by Article 62 (9) of the Constitution, other economic plans can also be decided autonomously by the State Council or its organs.

Climate governance with Chinese characteristics has produced a mixture of considerable positive outcomes and critical challenges,⁵⁶ and the developmentalist approach also has notable drawbacks in practice. At least three of these drawbacks are closely linked to the 'governing by planning' paradigm. First, this paradigm enables the central and regional governments to make independent and apparently

sound decisions, while lacking transparency. Apart from the evident legitimacy problem, this lack of transparency can also entail serious implementation problems. These plans have no binding force *vis-à-vis* citizens, but are valid as disciplinary tools within the government, which means that their implementation depends on internal bureaucratic disciplinary channels. In practice, emission reduction targets are translated into indicators that are used to assess the performance of officials. Almost every interviewee who operates at the local or provincial level told me that they take the emission reduction targets seriously, at least partly, because their ‘political lives’ can be put in danger if these targets are not met. When handled carefully, reduction targets can incentivize bureaucrats to prioritize climate governance over local economic growth. However, some local political leaders believe that the targets must be met at any cost if they are to save their hopes for promotion, and therefore push industrial and residential sectors to extreme limits. The most ridiculous example may be the prohibition of coal burning in impoverished rural areas in the freezing winter. The radical electricity cut that some economically advanced coastal regions experienced in the summer of 2021 is a less ridiculous example, and yet revealed the deeper structural problems of the Chinese government and industries.⁵⁷

Second, the ‘governing by planning’ paradigm is subject to an accountability problem. Ordinary citizens cannot challenge these plans. In the administrative procedure, upon the plaintiff’s request the court has the power to examine whether a regulatory rule inferior to ministerial regulations is in violation of a higher norm, as is provided for by Article 53 of the APL. Though the court cannot declare the rules in question invalid, it can refuse to apply them and mandate the executive to review its rules.⁵⁸ Since the existing climate plans or roadmaps set only vague and indeterminate goals and targets that have no direct effects on individual rights, it is very difficult, if not impossible, for affected citizens to claim that their rights are infringed by these policies rather than the misinterpretation or misadministration of them. A paradox emerges: even regional industrial policies can affect the

52 Zhu (n 11).

53 He (n 9).

54 See ‘Enhanced Actions on Climate Change: China’s Intended Nationally Determined Contributions’ (*Xinhua*, 30 June 2015) <http://www.china.org.cn/environment/2015-06/30/content_35950951.htm> Last visit: 2022-01-01

55 The most famous example seems to be Japan’s strategy of replacing domestically produced coal by imported oil in the 1960s. This adjustment of energy structure practically put domestic coalmines out of business and created considerable unemployment.

⁵⁶ Zhu Liu and others, ‘Challenges and Opportunities for Carbon Neutrality in China’ [2021] *Nature Reviews Earth & Environment* 1; Kelly Sims Gallagher and others, ‘Assessing the Policy Gaps for Achieving China’s Climate Targets in the Paris Agreement’ (2019) 10 *Nature Communications* 1256.

⁵⁷ Shivani Singh and Min Zhang, ‘China Power Crunch Spreads, Shutting Factories and Dimming Growth Outlook’ *Reuters* (27 September 2021).

58 Zhu (n 11).

livelihoods of hundreds of thousands of people who earn their livings from certain sectors, but no one can solicit the judges to examine them.

Third, public participation is absent in the making of policy. Unlike environmental decision-making processes, in which a certain degree of public participation is always required, macroeconomic decision-making tends to be carried out within the black box of bureaucracy. In a developmental state, public participation can be absent even in the making of nuclear policy.⁵⁹ In China, climate policy is decided mainly by specialized experts trained in polytechnical universities who spend decades working as experts or technocrats in highly specialized administrations. These experts do not attend public meetings nor do they defend their stance in front of concerned groups. Moreover, it can even be said to be a bureaucratic virtue not to think out of the departmental box and interfere with other departments' business. When asked a question concerning the unemployment and social inequality that can accompany energy transitions, several macroeconomic or industrial experts from various industries reacted in almost the same way: "that's the business of the social security department, not mine". Furthermore, climate policy is always framed in abstract and specialized language that cannot always be understood by ordinary citizens. The institutional isolation and terminological barriers simply cut the general public off from climate policy.

Public participation, transparency, and accountability are pillars of modern democracy. Recently, the question of whether 'authoritarian environmentalism' can be considered to be an alternative to 'democratic environmentalism' has raised scholarly attention.⁶⁰ One argument is that an authoritarian approach is needed to take drastic measures and respond to the crisis more effectively.⁶¹ A closer empirical survey of China's implementation of climate policy will certainly enrich a theoretical discussion that has severe, irreversible and large-scale socio-political impacts.

⁵⁹ Hiro Saito, 'The Developmental State and Public Participation: The Case of Energy Policy-Making in Post-Fukushima Japan' (2021) 46 *Science, Technology, & Human Values* 139.

⁶⁰ Ross Mittiga, 'Political Legitimacy, Authoritarianism, and Climate Change' [2021] *American Political Science Review* 1; Alex L Wang, 'Symbolic Legitimacy and Chinese Environmental Reform' (2018) 48 *Environmental Law* 699; Bruce Gilley, 'Authoritarian Environmentalism and China's Response to Climate Change' (2012) 21 *Environmental Politics* 287.

⁶¹ Mittiga (n 60).

Conclusion

In 2005, when the former President Hu Jintao delivered a speech to a meeting between the Group of Eight and developing countries, he said that “climate change is, at the same time, a problem of environment and of development, but ultimately a problem of development.”⁶² A graduate of the University of Tsinghua and who began his career as a hydropower engineer, former President Hu is himself a ‘red engineer’ and his opinion represents the way in which climate change is conceived by a large number of the technocrats who have been in power in China. In recent decades, China’s policymakers, diplomats and political leaders have realized that they must maintain the speed of economic growth and industrial modernization despite the urgent need to address climate challenges. They believe that the apparent paradox between ‘sustainability’ and ‘development’ can be solved by careful macroeconomic management that can transform China’s industries in a new era where high productivity and low fossil fuel consumption can be achieved simultaneously.

In the current political context of China, where the concept of ‘eco-civilization’ has been mainstreamed, the evolution of the developmentalist approach remains a subject of discussion. The 2018 institutional reform increased the importance of the environmental bureaucrats in climate governance by affiliating the Department of Climate Change, the National Maritime Administration, and the National Administration of Forestry and Grassland to the MEE. On one hand, this reform, as well as other innovations in environmental law, may have the potential to redirect the course of China’s climate governance to a less industry-centric pathway. On the other hand, developmentalism may survive and continue to be the major climate governance paradigm as a result of path-dependence and inertia. We should not ignore the fact that senior politicians and diplomats are still concerned with the impact of mitigation measures on China’s strategic position in international rivalries, as is demonstrated by Cui Tiankai’s speech.

⁶² https://www.mee.gov.cn/home/ztbd/rdzt/qhbh/wgyd/200507/t20050711_68412.shtml. Last visit: 2022-01-01