

Constitutional, Governance or Market Failures: China, Climate Change and Energy Transition

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1 Introduction

China is a major player in climate change mitigation. In September 2016, China formally ratified the Paris Agreement.¹ Four years later, President Xi Jinping announced China's plan to further scale up its Intended Nationally Determined Contributions, aiming at achieving CO₂ emissions peak before 2030 and carbon neutrality before 2060.² A central element of the plan is reducing China's heavy reliance on coal power. As a result, China's use of coal already saw a steady decrease between 2013 and 2018. While coal demand increased in 2019 and 2020, new coal power plants approved in 2021 declined by approximately 58% compared to 2020.³ However, the good progress in energy transition was interrupted by the power outage sprawling over 20 provinces in China in September 2021, which resulted in a U-turn in the policy. Consequently, China reversed its course of action and approved more coal power plants in the last month of 2021 than it did in the previous eleven months combined. This trend continued in 2022, with the coal power capacity approved in the first quarter of 2022 accounting for almost half of the total capacity approved in 2021.

This paper explores the reasons behind China's policy shift, drawing from insights on the policy-making process in China's climate change mitigation

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1 Brian Spegele, 'China's Legislature Ratifies Paris Agreement on Climate Ahead of G-20 Meeting' (*The Wall Street Journal*, 2 September 2016).

2 CGTN, 'Full Text: Xi Jinping's Speech at General Debate of the 75th Session of the United Nations General Assembly' (*CGTN*, 23 September 2020).

3 Yujie Xue, 'China's approvals for new coal plants rebound amid renewed focus on energy security after last year's power crisis: Greenpeace' (*South China Morning Post*, 20 July 2022).

and energy transition policy. In particular, the paper addresses the following questions: What are the major domestic factors driving China's policy and the major players involved in the decision-making? What are the conflicts between national and subnational interests and approaches, and how have these conflicts been resolved? How has the bargaining between different domestic players impacted China's approaches in trade negotiations?

The paper also compares the implementation of climate policies with the implementation of trade policies in China, discusses the potential consequences of constitutional and market failures due to "competition among purposes"⁴ at both the domestic and international levels, and offers more general observations on ways to help developing countries overcome such competition and conflicts.

2 The Evolution of China's Climate Change Policy: a Brief Account

The development of climate policies in China has been shaped not only by China's overarching economic development goals and plans, but also by China's international engagements and commitments. As early as in 1972, the United Nations Conference on the Human Environment prompted China to consider environmental issues and develop its first set of environmental legislation.⁵ However, it was not until the 1990s that China made major progress in advancing its environmental policy and regulatory framework. In 1990, the State Council established the National Coordination Group on Climate Change (NCGCC), which subsequently participated actively in the United Nations Conference on Environment and Development (UNCED) in 1992, also known as the Earth Summit.⁶ This conference developed a blueprint for international cooperation on environmental and development issues and led to the conclusion of the United Nations Framework Convention on Climate Change (UNFCCC), the first international treaty on climate change.⁷ The Convention created the Conference of the Parties (COP) to monitor the implementation of

4 Jorge E. Viñuales, *The International Law of Energy* (Cambridge University Press 2022) 28.

5 Tianbao Qin and Meng Zhang, 'Development of China's Environmental Legislation', in Eva Sternfeld (eds), *Routledge Handbook of Environmental Policy in China* (Routledge 2017) 19.

6 Ye Qi and Tong Wu, 'The Politics of Climate Change in China' (2013) 4 *WIREs Climate Change* 301, 303. See also United Nations, 'A new blueprint for international action on the environment' (*United Nations*, 1992).

7 United Nations, 'What is the United Nations Framework Convention on Climate Change?' (*United Nations*).

the covered commitments, promote information exchange and coordination and further international cooperation on climate actions.⁸ China has actively engaged in all COPs, including the negotiations and conclusion of the Kyoto Protocol⁹ at COP3 in 1997 and the Paris Agreement¹⁰ at COP21 in 2015.

China's active engagement in climate policymaking at the international level has progressively enriched its own knowledge about climate change, leading to the gradual elevation of sustainable development and climate policies to a core, strategic national policy in China. In 1998, the NCGCC was relocated to the State Development Planning Commission, the predecessor of the National Development and Reform Commission (NDRC) and the most powerful agency in the central government.¹¹ The 10th Five-Year Plan (2001–2005) made a reference to climate change for the first time and emphasized the growth of renewable energy, energy conservation and environmental protection leading to the promulgation or amendments of a range of laws and regulations such as the Renewable Energy Law which took effect in 2006.¹² However, during this period the national priority was focused on economic growth, and no specific targets were set for climate actions. Due to the heavy reliance on energy-intensive industries for economic development and industrialization, China became the world's largest emitter of energy-related carbon dioxide (CO₂) in 2005.¹³ The environmental degradation, especially air pollution, intensified public debate over China's environmental policy and provoked the central government to strengthen climate policy and actions in the next decade.

During the 11th Five-Year Period (2006–2010), the central government set energy efficiency targets, allocated individual targets to provinces, and required

8 See United Nations, 'United Nations Framework Convention on Climate Change' (*United Nations*, 9 May 1992) art 7.

9 United Nations, 'What is the Kyoto Protocol?' (*United Nations*) <https://unfccc.int/kyoto_protocol>.

10 United Nations, 'The Paris Agreement. What is the Paris Agreement?' (*United Nations*).

11 See above Qi and Wu, 'The Politics of Climate Change in China' (n 6) 303.

12 See David Sandalow and others, 'Guide to Chinese Climate Policy 2022' (*Oxford Institute of Energy Studies*, 2022) 32; Qin and Zhang (n 5) 21. See also The Central People's Government of the People's Republic of China, 'The Outline of the 10th Five-Year Plan for Economic and Social Development of the People's Republic of China' (中华人民共和国国民经济和社会发展第十个五年计划纲要) (*The Central People's Government of the People's Republic of China*, 15 March 2001); The Central People's Government of the People's Republic of China, 'Renewable Energy Law of the People's Republic of China' (中华人民共和国可再生能源法) (*The Central People's Government of the People's Republic of China*, 21 June 2005).

13 International Energy Agency, 'An Energy Sector Roadmap to Carbon Neutrality in China' (*IEA*, September 2021) 22.

local governments to implement.¹⁴ In 2007, the NDRC published China's first detailed National Plan to Address Climate Change,¹⁵ and the NCGCC was further elevated to become the National Leading Group on Climate Change. Led by the then Premier Wen Jiabao, this group included all major ministries of the central government in charge of developing national climate policies and actions, guiding China's international cooperation and negotiations, and coordinating the implementation of greenhouse gas (GHG) mitigation strategies.¹⁶ China's effort to address environmental issues during this period, however, was compromised by the need to react to the global financial crisis in 2008–09 through the introduction of massive stimulus plans to maintain economic growth including supporting energy-intensive industries.¹⁷ This was another notable incident which revealed the challenges faced by the Chinese government in overcoming the underlying tensions between its pursuit of climate goals and economic growth.

The 12th Five Year Plan (2011–2015) was a landmark in China's advancement of climate policy leading to a period of remarkable achievements at both domestic and international levels. The Plan set out a clear mandate to transform China's economic development model with the transition to a green economy and a sustainable development path as one of its priorities.¹⁸ It devoted a whole chapter to climate change and set forth specific, binding targets and action plans including reducing carbon intensity and energy consumption, increasing non-fossil energy sources and government support for strategic, green industries and technologies, promoting the restructuring of the coal industry, enhancing the system for monitoring GHG emissions, planning the creation of a carbon trade market, etc.¹⁹ More detailed plans were subsequently released in a series of implementation regulations including

14 See above Sandalow and others (n 12) 33–5.

15 National Development and Reform Commission, 'China's National Plan for Addressing Climate Change' (中国应对气候变化国家方案) (*National Development and Reform Commission*, June 2007).

16 See above Qi and Wu, 'The Politics of Climate Change in China' (n 6) 303. See also The State Council of the People's Republic of China, 'Introduction to the National Coordination Group for Addressing Climate Change' (*China Climate Change Info-Net*, 17 July 2006).

17 See above Sandalow and others (n 12) 34.

18 The Central People's Government of the People's Republic of China, 'The Outline of the 12th Five-Year Plan for Economic and Social Development of the People's Republic of China' (中华人民共和国国民经济和社会发展第十二个五年规划纲要) (*The Central People's Government of the People's Republic of China*, 16 March 2011).

19 For a more detailed discussion of China's climate policy and goals under the 12th Five Year Plan, see Sam Geall and others, *China's Green Revolution: Energy, Environment and the 12th Five-Year Plan* (Chinadialogue 2011).

most significantly the Work Plan for Controlling Greenhouse Gas Emission²⁰ published by the State Council in December 2011 and the National Plan on Climate Change issued by the NDRC in 2014.²¹ The latter set out China's plans and goals relating to GHG mitigation, climate change adaptation and priorities in its green transition by 2020.

As a strong proponent for the Paris Agreement, China submitted its first “nationally determined contributions” (NDCs) to the UNFCCC in 2015, committing to specific targets for the reduction of CO₂ emissions and the increase of non-fossil fuels in primary energy consumption, amongst other commitments.²² These targets were incorporated in China's 13th Five-Year Plan (2016–2020).²³ To achieve these targets, the central government rolled out a new set of policy documents to detail the action plans and allocate targets to provinces.²⁴ By the end of this period, CO₂ emissions per unit of GDP (i.e. carbon intensity) in China were approximately 48% lower than the 2005 level (or a 40–50% reduction), and the share of non-fossil fuels in primary energy consumption was approximately 16% marking “a significant increase of 8.5 percentage points compared with 2005”.²⁵

20 The State Council of the People's Republic of China, 'Working Plan for Greenhouse Gas Emission Control in Implementing the 12th Five-Year Plan' (国务院关于印发“十二五”控制温室气体排放工作方案的通知) (*The Central People's Government of the People's Republic of China*, 01 December 2011).

21 National Development and Reform Commission, 'The National Plan (2014–2020) for Addressing Climate Change' (国家发展改革委关于印发国家应对气候变化规划(2014–2020年)的通知) (*National Development and Reform Commission*, 19 September 2014).

22 National Development and Reform Commission, 'Enhanced Actions on Climate Change: China's Intended Nationally Determined Contributions' (强化应对气候变化行动—中国国家自主贡献) (*National Development and Reform Commission*, 30 June 2015).

23 The Central People's Government of the People's Republic of China, 'The Outline of the 13th Five-Year Plan for Economic and Social Development of the People's Republic of China' (中华人民共和国国民经济和社会发展第十三个五年规划纲要) (*Xinhua*, 17 March 2016).

24 National Development and Reform Commission and National Energy Administration, 'The 13th Five-Year Plan for the Development of Energy' (能源发展“十三五”规划) (*National Development and Reform Commission and National Energy Administration*, 26 December 2016); The State Council of the People's Republic of China, 'The Comprehensive Working Plan for Energy Conservation and Emission Reduction for Implementing the 13th Five-Year Plan' (“十三五”节能减排综合工作方案) (*The State Council of the People's Republic of China*, 20 December 2016).

25 The State Council Information Office of the People's Republic of China, 'Full Text: Responding to Climate Change: China's Policies and Actions' (*The State Council Information Office of the People's Republic of China*, 27 October 2021).

Since 2020, President Xi Jinping reiterated, in a series of high-profile global events, China's pledges to combatting climate change through more vigorous policies and measures in order to achieve "CO₂ emissions peak before 2030 and carbon neutrality before 2060", which are known as China's "30–60" or "dual carbon" goals.²⁶ This commitment was incorporated in China's updated NDCs submitted to the UNFCCC prior to COP26 in October 2021.²⁷ More specifically, China commits to

lower CO₂ emissions per unit of GDP by over 65% from the 2005 level, to increase the share of non-fossil fuels in primary energy consumption to around 25%, to increase the forest stock volume by 6 billion cubic meters from the 2005 level, and to bring its total installed capacity of wind and solar power to over 1.2 billion kilowatts by 2030.

These commitments and goals are also embedded in China's 14th Five-Year Plan (2021–2025)²⁸ and are being implemented through a range of policy documents designed to promote climate actions and compliance nationwide during the Plan period in pursuit of the "dual carbon" goals. In May 2021, the central government established a Leading Group on Carbon Peak and Carbon Neutrality to strengthen and better coordinate national climate policies and actions.²⁹ Through the work of this group, China adopted a "1+N" policy system under which the "1" refers to the *Working Guidance for Completely, Accurately and Comprehensively Implementing the New Development Concept and Achieving Carbon Dioxide Peak and Carbon Neutrality* (hereinafter Working Guidance 2021),³⁰ the overarching national plan jointly issued by the Central Committee

26 See above CGTN (n 2); Xinhua, 'Full Text: Remarks by Chinese President Xi Jinping at Leaders Summit on Climate' (*Xinhua*, 22 April 2021).

27 Ministry of Ecology and Environment of the People's Republic of China, 'China's Achievements, New Goals and New Measures for Nationally Determined Contributions' (中国落实国家自主贡献成效和新目标新举措) (*Ministry of Ecology and Environment of the People's Republic of China*, 28 October 2021).

28 The Central People's Government of the People's Republic of China, 'The Outline of the 14th Five-Year Plan for National Economic and Social Development and Long-Range Objectives for 2035 the People's Republic of China' (中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要) (*The Central People's Government of the People's Republic of China*, 13 March 2021).

29 See above Ministry of Ecology and Environment (n 27) 5–6.

30 The Central People's Government of the People's Republic of China, 'Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy' (完整准确全面贯彻新发展理念做好碳达峰碳中和工作的意见) (*The Central People's Government of the People's Republic of China*, 22 September 2021).

of the Communist Party of China and the State Council in October 2021. The “N” refers to all subordinate policy documents including detailed action plans in different industries and sectors of the economy. For example, the issuance of the Working Guidance 2021 was accompanied by the release of the *Action Plan for Carbon Dioxide Peaking Before 2030*³¹ by the State Council, which constitutes part of the “N”. This design of China’s climate policies, with the central government playing a leadership role, continues to reinforce China’s top-down approach to climate policymaking.

3 The Coal Energy Transition: a Closer Look

The overview of the evolution of China’s climate policy above shows that climate change has become “an integral part of China’s development vision and strategy” and that China has committed to “more ambitious action to tackle climate change.”³² At the same time, China’s climate action has faced considerable, ongoing challenges. To understand the major drivers of and challenges for China’s climate action, we use as a case study coal energy transition, which is critical to the success of China’s climate policy.

China’s phenomenal economic development and industrialization in past decades has relied heavily on energy-intensive activities leading to massive production and consumption of fossil fuels, especially coal. As the world’s largest coal user, in 2018 China’s electricity and heat generation accounted for approximately 45 percent of all domestic GHG emissions, and its heavy industrial production, particularly in the steel, iron and cement sectors, accounted for approximately 85 percent of industrial CO₂ emissions.³³ Energy efficiency, renewables and reduction of coal use are therefore essential to the achievement of China’s climate goals on CO₂ emissions peaking and carbon neutrality.³⁴ Consequently, China has progressively intensified its climate policy and actions in these areas leading to a significant growth of low-carbon fuel and technologies and reduction of coal use in power and industrial production (especially between 2013–2018).³⁵ Concrete actions taken in the 13th Five-Year

31 The State Council of the People’s Republic of China, “The Action Plan for Reaching Carbon Dioxide Peak before 2030” (2030年前碳达峰行动方案) (*The State Council of the People’s Republic of China*, 24 October 2021).

32 See above International Energy Agency (n 13) 37.

33 See above Sandalow and others (n 12) 45; World Bank Group, ‘Country Climate and Development Report: China’ (*World Bank Group*, October 2022) 26, 45.

34 See above Sandalow and others (n 12) 14.

35 *Ibid* 24–6.

period involved, for instance, restricting the construction of new coal-fired power generation plants, closing existing plants which failed to comply with efficiency standards, subsidizing clean coal power generation, energy-efficiency investments, renewable energies, related technologies and R&D, etc.³⁶ During the current 14th Five-Year period, China remains committed to its ambitious goals in these areas. For example, by 2025, China aims to reach 20% share of non-fossil fuel in primary energy use and reduce energy intensity by 13.5% and carbon intensity by 18% from the 2020 levels.³⁷ It sets specific targets for the expansion of major renewable energies and the reduction of coal production and consumption in key industrial processes making coal consumption peaking a priority.³⁸ Apart from these internal targets, China's updated NDCs also include commitments not to build new coal-fired power projects overseas, and it has cancelled or stopped investing in 26 such projects since 2021.³⁹ At the same time, however, China's national policy also emphasizes the need to protect energy security and improve self-sufficiency in energy supply,⁴⁰ foreshadowing the major policy considerations that may counterbalance China's climate pledges.

There are notable driving forces behind China's entrenched commitment to climate actions. This commitment is first and foremost a strategic choice aligned with and supportive of China's own development goals and political needs. As Chinese leaders become increasingly convinced that the old "growth-at-any-cost model" cannot be sustained,⁴¹ energy efficiency, decarbonization and sustainability enter the centrepiece of China's economic transformation. While economic growth remains a priority, Chinese leaders become increasingly aware of the political risks associated with growing social unrest due to environmental degradation and adverse effects of climate change.⁴² Thus, there is a strong political will to steer China toward the new

36 Craig Hart and others, 'Mapping China's Climate & Energy Policies' (*Development Technologies International*, December 2018) 86–101.

37 See above The State Council of China (n 31).

38 Ibid.

39 See above Ministry of Ecology and Environment (n 27) 2; Isabella Suarez and Xiaojun Wang, 'Year Review: The Impact of China's Ban on Overseas Coal Power Plants on Global Climate' (*Centre for Research on Energy and Clean Air*, 22 September 2022) 3.

40 National Development and Reform Commission and National Energy Administration, 'The 14th Five-Year Plan for the Modern Energy System' ("十四五"现代能源体系规划) (*National Development and Reform Commission and National Energy Administration*, 29 January 2022).

41 Genia Kostka, 'China's Local Environmental Politics' in Eva Sternfeld (eds), *Routledge Handbook of Environmental Policy in China* (Routledge 2017) 31.

42 Ibid.

sustainable development path to balance economic growth with environmental and public health concerns and to enhance government accountability and maintain political stability.⁴³ At the international level, climate policies and actions play an important role in fostering China's reputation as a responsible stakeholder and trustworthy partner⁴⁴ and securing "recognition of its status as a global power and its leadership in international governance".⁴⁵ By committing to ambitious climate targets, China can use its international commitments to push domestic reforms and economic transformation.⁴⁶ With the political consensus reached within the central government, China's political system provides the foundation for its top-down approach to climate policy-making which facilitates the design of climate policies, as further discussed in Section 4.⁴⁷

At the same time, China's climate action faces acute challenges particularly due to the need to accommodate its energy needs and the diverse interest of local governments, industries, state entities and other stakeholders in implementation. Here too, China's commitment to the reduction of coal production and consumption provides a telling example. While China took an incremental approach to reducing coal use in the past, it deviated from its coal reduction policy in September 2021, when over 20 provinces in China cut power supplies allegedly due to power outages. This in turn led to a massive approval of new coal power plants, with more approvals in the final month of 2021 than in all preceding 11 months combined.⁴⁸ The effect was also felt in 2022, with coal power capacity approved in the first quarter alone equals to half of the total approved capacity in 2021.⁴⁹

4 Making Sense of China's Policy Shift: Gaps in Energy Transition and Governance

So what explains the policy shift in 2021? On the surface, here are a few apparent reasons, such as the rising demand, the insufficient supply from traditional

43 See above International Energy Agency (n 13) 35–6; Lisa Williams, 'China's Climate Change Policies: Actors and Drivers' (*Lowy Institute*, July 2014) 16.

44 See above Williams (n 43) 18.

45 See above Hart and others (n 36) 138.

46 See above International Energy Agency (n 13) 35.

47 See above Qi and Wu (n 6) 302.

48 Xinnan Wang, 'Provincial Approval on Coal Fired Power Revived after Power Rationing, Local State-Owned Capital Refilled Strongly' (*Greenpeace*, 20 July 2022).

49 Ibid.

coal power, and the unreliability of renewable energy.⁵⁰ However, deep down, China's policy shift must be understood in terms of the multifaceted interactions among different stakeholders at both the domestic and international levels. More specifically, the bargaining between these forces shapes not only the making of China's domestic policy and international commitments, but also the implementation (or non-implementation) of such policies.

As noted above, China's policymaking generally follows a top-down process whereby policies are made by the central leadership without much input from local governments or consultations with other stakeholders. This means that, at the front-end of policy making, China could avoid the tortuous bargaining process required in many other countries which often leads to the need to strike compromises that nobody is happy with, or even paralysis where the decision could not be made. This is reflected in China's climate policymaking, where the main decision-maker is the central government, or more specifically President Xi himself.

At the domestic level, the seriousness China has attached to climate policies is a reflection of President Xi's "New Development Concept" (新发展理念). True to the nature of Communism as an ideology, even paramount leaders have come up with new "thoughts", from Deng Xiaoping's "Socialism with Chinese Characteristics", to Jiang Zemin's "Three Represents", to Hu Jintao's "Scientific Outlook on Development", and finally to "Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era", where the "New Development Concept" is an important component. This Concept emphasizes "Innovation, Coordination, Green, Openness, Sharing" as a way to shift China's economic model to one of a high-quality and low-pollution.⁵¹ The link between the Concept and China's carbon goals is explicitly confirmed by the top policy document issued by the central government, i.e., the Working Guidance 2021.⁵² By shifting the policy in a new direction, the Concept also provides a convenient way to test the loyalty of local officials based on whether they faithfully implement the Concept, which is why the Working Guidance 2021 repeatedly refers to "compacting local responsibilities"⁵³ and "strengthening supervision and assessment"⁵⁴ under the leadership and coordination

50 David Fishman, 'Reasons Behind China's Power Shortage in Q4 2021, Resultant Reform Measures, and the Impact on Power Markets', (Oxford Energy Forum, March 2022, Issue 131) 13–20.

51 Xinhua, 'Full and Faithful Implementation of the New Development Philosophy: Grasp the theory of 'Five Inevitable Routes' deeply and thoroughly' (*Xinhua*, 14 March 2022).

52 See above The Central People's Government (n 30).

53 Ibid.

54 Ibid.

of the central government as the way to achieve the “dual carbon” goals. In addition, the central government launched a major restructuring of agencies in 2018 to provide both the carrot and stick needed to get local governments in action. The carrot is held by the newly formed Ministry of Natural Resources (MNR), which took over the portfolio from several other agencies, including the all-important power of urban and rural planning from the NDRC and the Ministry of Housing and Urban-Rural Development.⁵⁵ The MNR “takes charge of the owner’s responsibilities for all types of natural resource assets owned by the whole people”, which gives it control of all natural resources as a powerful carrot.⁵⁶ On the other hand, a new Ministry of Ecology and Environment was also formed to take over the powers of anti-pollution enforcement that used to be scattered through several agencies⁵⁷ such as the former Ministry of Land and Resources, the Ministry of Water Resources, the Ministry of Agriculture, and the State Oceanic Administration, as well as the enforcement of climate change and emission reduction goals from the NDRC.⁵⁸ This provides it with a big stick as all environmental enforcement powers are now controlled by one agency.

If the *raison d'être* of “promoting high-level development” still stays true to climate goals at the domestic level, the main rationale for climate responsibility at the international level, i.e. “to foster an image of responsible power”, sounds even more instrumentalist.⁵⁹ In particular, President Trump’s “irresponsible”⁶⁰ decision to withdraw the US from the Paris Agreement in 2017⁶¹ left a vacuum in climate leadership, one which China was eager to fill as a way to “enhance China’s international influence and discourse power”.⁶² By

55 The Central People’s Government of the People’s Republic of China, ‘The Plan for the Institutional Reform of the State Council of the People’s Republic of China’ (国务院机构改革方案) (*The Central People’s Government of the People’s Republic of China*, 17 March 2018).

56 Wang Yong, ‘Explanations on the Plan for the Institutional Reform of the State Council of the People’s Republic of China’ (关于国务院机构改革方案的说明) (*Xinhua*, 17 March 2018).

57 Ibid.

58 Ibid.

59 Zhenhua Xie, ‘Persistently Confronting Climate Change and Continuing to Involve, Contribute and Lead the Global Construction of Ecological Civilization: In the Memory of the Ratification of the Paris Agreement’ (*China Environment News*, 14 December 2020).

60 Ministry of Foreign Affairs of the People’s Republic of China, ‘Report on the United States Prejudicing Global Environmental Governance’ (*Ministry of Foreign Affairs of the People’s Republic of China*, 19 October 2020).

61 Timothy Cama and Devin Henry, ‘Trump: We Are Getting out of Paris Climate Deal’ (*The Hill*, 1 June 2017).

62 See above The Central People’s Government (n 30).

the time that the withdrawal took effect in late 2020,⁶³ China further realized that, given the importance that Democratic Party Presidential candidate Joe Biden attached to the Paris Agreement, climate change could provide an opening to revive bilateral cooperation between the US and China following the devastating “trade war” waged by the Trump administration, akin to the Ping-pong diplomacy which opened the door for the establishment of the bilateral diplomatic relations some 50 years ago. This point was confirmed explicitly by President Xi in his first summit with Biden in November 2021, where he emphasized that “given that China and the U.S. used to work together to make the Paris Agreement possible, climate change can definitely become a new highlight of Sino-US cooperation”.⁶⁴ With such an instrumentalist approach to climate change, it is no surprise that China decided to temporarily suspend the bilateral climate change talks with the US as a counter-measure against the US when US Congress Speaker Nancy Pelosi visited Taiwan in August 2022 despite China’s strong opposition.⁶⁵ As made clear by China, it “had to suspend Sino-US climate change negotiations in view of Pelosi’s visit, and all consequences must be borne by the United States.”⁶⁶

While the climate change policymaking power is monopolized by the central government, when it comes to the implementation of such policies, the central government must work together with local governments and other stakeholders such as power plants and downstream user industries. This is where things get tricky, as these players often have different incentives and therefore do not always behave the same way as the central government would prefer.

As noted earlier, after the central government set forth the overarching climate goals, it allocated specific targets to different provinces for local governments to implement. Unlike their counterparts in the West,⁶⁷ the local governments in China do not have to answer to local constituencies or civil society

63 Leslie Hook and Katrina Manson, ‘US Formally Withdraws from Paris Climate Agreement’ (*Financial Times*, 4 November 2020).

64 Xinhua, ‘President Xi Jinping’s Web Conference with the US President Biden’ (*Xinhua*, 16 November 2021).

65 Ministry of Foreign Affairs of the People’s Republic of China, ‘Sanction against Pelosi’s Sneaky Visit to Taiwan’ (*Ministry of Foreign Affairs of the People’s Republic of China*, 5 August 2022).

66 Xinhua, ‘Facts about Pelosi’s Visit to Taiwan’ (*Xinhua*, 25 August 2022).

67 Christopher Gore and Pamela Robinson, ‘Local Government Response to Climate Change: Our Last, Best Hope?’ in Henrik Selin and Stacy D VanDeveer (eds), *Changing Climates in North American Politics: Institutions, Policymaking, and Multilevel Governance* (MIT Press 2009).

groups. Instead, their main function is to implement the targets set by the central government. The promotion of local officials is decided by how well they implement such targets, which used to focus predominantly on GDP growth. In view of the growing importance of environmental issues, the central government included environmental indicators such as the achievement of climate goals in recent years to evaluate the performance of local officials. So why did the central government take such an abrupt policy shift in late 2021? We offer two explanations.

4.1 *Last-Minute Rush to Meet the Targets*

On 12 August 2021, the NDRC issued the notice on the “First half of 2021 Barometer on the completion of energy consumption dual control targets in each region”, which listed in the top warning category 9 provinces for the achievement of energy intensity reduction goals, and 8 provinces for the achievement of total energy consumption control goals.⁶⁸ The NDRC also made clear that, “from the date of issuance of this notice, for regions where energy consumption intensity has risen instead of fallen, the energy-saving review of “two high” (high energy consumption, high emissions) projects will be suspended in 2021”.⁶⁹ To make sure that the local governments got the message, the NDRC further issued the “Plan on the improvement of the dual control system for energy consumption intensity and total volume” on 16 September 2021,⁷⁰ which explicitly stated that the assessment results for the dual control system “will be handed over to the competent department of cadres as an important basis for the comprehensive assessment and evaluation of the leadership team and leading cadres of the Provincial Government”.⁷¹

These documents spurred the provinces into quick action, especially those in the top warning category. This is most evident in the two provinces with the biggest industrial outputs, i.e., Guangdong and Jiangsu, which are both listed in the top warning categories for both targets.

68 National Development and Reform Commission, ‘Report on the implementation of the dual-control of energy consumption in each province in the first half of 2021’ (关于印发《2021年上半年各地区能耗双控目标完成情况晴雨表》的通知) (*National Development and Reform Commission*, 17 August 2021).

69 Ibid.

70 National Development and Reform Commission, ‘Improving the plan of the dual-control of the intensity and quantity of energy consumption’ (关于印发《完善能源消费强度和总量双控制度方案》的通知) (*National Development and Reform Commission*, 16 September 2021).

71 Ibid.

It might be argued, however, that there were less drastic actions available to local governments than simply cutting off the power supply. Though in a country where lower level governments are supposed to blindly follow central government orders, such drastic actions would send a strong signal up the command chain, giving the local governments some bargaining power when the central government is forced to take action in response to anger from downstream user industries including the many SOEs with deep links to the central government.

4.2 *Power Shortages and Incomplete Market Reform*

At the same time, it is also interesting to note that the above rationale might not apply to all provinces imposing restrictions on power usages. For example, none of the three provinces in the north-eastern region were in the top warning category (red). Instead, Jilin was in the green category for both targets. For Heilongjiang and Liaoning, their energy consumption and energy intensity reduction achievements were green and yellow respectively. This means that they did not really need to cut power usages to meet the mandatory targets. Rather, they seem to have real power shortage problems, as complicated by factors such as the reduction of wind, solar and hydro power and the national shortage of coal.⁷²

So how could there be power shortages if the market mechanism was working? Aren't power shortages the best excuse for power plants to gear up their production and generate more power and thus more profits? The answer, it turns out, is that the market transformation is far from complete in China.

China's power prices have traditionally been set by the government. This is also reflected in China's WTO commitments, which explicitly list prices of both electricity and heating power as one of the goods and services which may be subject to price controls.⁷³ In 2004, in an effort to promote market reform, the government established the coal and electricity price linkage mechanism.⁷⁴ Under the new system, power prices are supposed to be adjusted upward or downward depending on the coal prices in the preceding period (normally no less than 6 months). Since mid 2016, coal prices rose rapidly and stayed

72 Ziwen Jiang, 'The government officially disclosed the reasons why three provinces in Northeast China were forced power rationing' (*Pengpai News*, 27 September 2021).

73 WTO, 'Protocol on the Accession of the People's Republic of China, WT/L/432' (WTO, 23 November 2001) Annex 4.

74 National Energy Administration, 'Guidance on establishing the mechanism of coal-electricity price linkage' (关于建立煤电价格联动机制的意见的通知) (*National Energy Administration*, 17 August 2011).

at high levels.⁷⁵ According to the formula in the coal and electricity price linkage mechanism, electricity prices were supposed to be adjusted upwards. However, in 2018,⁷⁶ in an effort to reduce the operating costs of manufacturing and business firms, the central government announced that the electricity prices would be reduced by 10%. A further 10% reduction was also announced in 2019.⁷⁷ This means that the more electricity power plants generated, the more losses they would incur. This is reflected in the financial reports of the State Grid, which incurred a loss of 17.8 billion Yuan in its power generation business in 2020, for the first time in its history.⁷⁸ This trend continued in 2021, with coal prices rising by as much as 300%,⁷⁹ and all state-owned coal power plants reportedly losing 101.7 billion Yuan in that year.⁸⁰ Thus, it is no surprise that power plants were not keen to generate more electricity. Instead, creating a gap in meeting the demand could be a way to force the central government to allow more price adjustment, and/or to seek subsidies from the government.

This strategy seemed to have worked. Right after the nation-wide power shortages, the NDRC issued the “Notice on further deepening market-oriented reform of on-grid electricity price for coal-fired power generation”, which expanded the upper price fluctuations limit from 10% to 20%, while the transaction price of high energy-consuming enterprises was not even subject to the 20% upper limit.⁸¹ In May 2022, the central government agreed to provide state-owned coal power plants with a subsidy package totalling 100 billion Yuan, along with 30 billion Yuan of additional capital injection,⁸² as well as

75 National Bureau of Statistic, ‘Coal production increased in rehabilitation, and the industrial layout was optimized in adjustment’ (*National Bureau of Statistic*, 20 March 2018).

76 Keqiang Li, ‘2018 Government Work Report’ (2018年政府工作报告) (*The Central People’s Government of the People’s Republic of China*, 05 March 2018).

77 Keqiang Li, ‘2019 Government Work Report’ (2019年政府工作报告) (*The Central People’s Government of the People’s Republic of China*, 05 March 2019).

78 Jinghua Xi, ‘The State Grid Corporation of China lost 17.8 billion yuan for the first time in its main business last year, and its profit hit a seven-year low’ (*Jiemian*, 16 April 2021).

79 Xiaoxing Liu, ‘Whether the dual-control policy of energy consumption should be responsible for power rationing?’ (*China Environment News*, 08 October 2021).

80 The State Council, ‘The State Council Information Office held a news conference on the economic operation of central enterprises in the first quarter of 2022’ (*The Central People’s Government of the People’s Republic of China*, 20 April 2022).

81 National Development and Reform Commission, ‘Notice on deepening the marketization reform of the on-grid price generated by coal-fired power’ (关于进一步深化燃煤发电上网电价市场化改革的通知) (*National Development and Reform Commission*, 11 October 2021).

82 Zhi Li, ‘Standing Committee of the State Council: Another 50 billion yuan of renewable energy subsidies will be allocated to central power generation enterprises’ (*Xinhua*, 11 May 2022).

approval for them to issue 200 billion Yuan of special bonds for energy supply guarantee.⁸³

5 Comparison with China's Trade Policy Making

As we can see from the above discussions on China's climate policy implementation, contrary to what might be assumed, it has not been easy to implement the policy despite China being a unitary state with a top-down power structure. This is because China is far from a monolithic entity with only one voice and one course of action. Instead, while the central government may make a policy, it might not be able to force the other actors, such as local governments and state-owned firms, to implement such policy.

This provides an interesting contrast with the implementation of China's trade policy, where the problems are mainly at the level of central government rather than local government. This is reflected in China's WTO disputes, where most of the cases brought against China are about trade remedy measures (especially subsidies measures) and various import and export restrictions that are introduced and implemented by the central government.

On the other hand, the same problems may be observed even in the trade area when the interests of the local and central governments are not aligned with each other. The best example is the protection of intellectual property (IP) rights, where the central government has for a long time been unable to enforce the IP laws due to local protectionism that results from the lack of incentives from the local government to crack down local IP-infringing firms that provide jobs and economic growth.⁸⁴ The problem was only solved after the local firms themselves became innovators, and started to pressure local governments to aggressively enforce China's own IP laws, which is also aligned with the goals of the central government to upgrade China's position in the value chain.⁸⁵

Such misalignment of the interests of different levels of government also explains China's negotiation positions in trade agreements. So far, most of China's commitments in free trade agreements (FTAs) have been on traditional border measures such as tariffs. This is because these issues are mainly

83 The Central People's Government of the People's Republic of China, '2023 New Year Message to Enterprises' (*Zhengfu*, 22 January 2023).

84 Bryan Mercurio, 'The Protection and Enforcement of Intellectual Property in China since Accession to the WTO: Progress and Retreat' (2012) 1 *China Perspectives* 23, 23.

85 *Ibid.*

controlled by the central government and thus are easier to implement. Behind the border regulatory issues are rarely included, especially difficult ones such as environment and labor, where enforcement needs to be relegated to local governments. In FTAs which do include these issues, the environment or labor provisions are often couched in non-binding, best endeavor language. Even when China started to include stronger CPTPP-like language such as “[a] Party shall not fail to effectively enforce its environmental measures including laws and regulations, through a sustained or recurring course of action or inaction, in a manner affecting trade or investment between the Parties”⁸⁶ in its latest FTAs such as the ones with Korea and Singapore, these clauses are still excluded from the application of the dispute settlement mechanisms under the respective FTAs,⁸⁷ probably due to the concern that implementation would be a major headache for the central government.

The conundrum China faces in implementing its climate change policies also highlights the importance of implementing more market reforms, which is often fraught with difficulties. Paradoxically, compliance with China’s trade commitments may sometimes further complicates the matter, as the “competition among purposes” between “different bodies of international law”⁸⁸ might lead to absurd results. Take, for example, China’s export restrictions on rare earth, the subject matter of a high-profile WTO dispute in 2012.⁸⁹ Theoretically speaking, direct environmental protection measures would be more efficient than export restrictions in addressing environment problems. Yet, the lack of effective enforcement by the local governments left China with only one real option: export restrictions implemented by the central government, even though that is not the optimal policy action in theory. After the case was launched in March 2012, it was almost certain that China would lose the case

86 Ministry of Commerce of the People’s Republic of China, ‘Free Trade Agreement between the Government of the People’s Republic of China and the Government of the Republic of Korea’ (*China FTA Network*, June 2015) art 16.5; Ministry of Commerce of the People’s Republic of China, ‘Free Trade Agreement between the Government of the People’s Republic of China and the Government of the Republic of Singapore’ (*China FTA Network*, 23 October 2008) ch 17, art 4.

87 See above China-Korea FTA (n 86) art 16.9; China-Singapore FTA (n 86) ch17, art 7.

88 See above *Vifiales* (n 4).

89 WTO, ‘Appellate Body Report, China – Measures Related to the Exportation of Rare Earths, Tungsten, and Molybdenum, WT/DS431/AB/R’ (*WTO*, 7 August 2014).

based on the unfavorable precedent of the *China – Raw Materials* case.⁹⁰ As it was almost impossible to get the local government to step up the enforcement, a leading expert at the Ministry of Commerce's International Trade and Economic Cooperation Research Institute proposed to have more state control in the sector through further consolidation of rare earth firms by SOEs.⁹¹ This is confirmed by subsequent developments, where all of the seven leading rare earth firms turned out to be SOEs.⁹²

More specifically, on the relationship between climate change and trade, China has been consistently opposing the use of trade measures for climate purposes. For example, China criticises the EU's Carbon Border Adjustment Mechanism (CBAM) as being inconsistent with WTO rules and the principles and requirements of the UNFCCC and the Paris Agreement.⁹³ Similarly, China refused to join the EU-led Coalition of Trade Ministers on Climate when it was announced at the World Economic Forum in 2023.⁹⁴ Instead, the Chinese Minister of Commerce voiced indirect disapproval of the initiative by stressing that "climate change shall be addressed through trade and investment liberalization and facilitation, rather than through trade restrictions and subsidy competition."⁹⁵ Again, China's position partly reflects its concern that, due to the challenges it faces in effectively implementing climate policies domestically, making binding climate-oriented trade policies at the international level could severely undermine China's policy space.

90 WTO, 'Appellate Body Report, China – Measures Related to the Exportation of Various Raw Materials, WT/DS394/AB/R' (WTO, 30 January 2012).

91 Xinyu Mei, 'The Dispute of Rare Earth: Short-Term Response and Radical Measures' (*Securities Times*, 16 March 2012).

92 Shujuan Bi, 'Mergers and Acquisitions of China's Rare Earth Industry Accelerated' (*China United Business News*, 13 July 2012).

93 China News, 'China's response to the 'Carbon Tariff': A contravention of both WTO rules and the principles and requirements stipulated by the Paris Agreement' (*China News*, 26 July 2021).

94 European Commission, 'Trade and Climate: EU and partner countries launch the 'Coalition of Trade Ministers on Climate'' (*European Commission Press Corner*, 19 January 2023).

95 Ministry of Commerce of the People's Republic of China, 'Wang Shouwen, the negotiator and deputy minister of the Ministry of Commerce, led a delegation to attend the small ministerial meeting hosted by the WTO in Davos' (*Ministry of Commerce of the People's Republic of China*, 20 January 2023).

6 Constitutional Failures, Environmental Authoritarianism and Transnational Governance Failures

It has been argued that democracies might face limits in tackling climate change due to their tendencies to focus on short-term gains for their constituencies⁹⁶ and their susceptibility to influences from business interests which oppose environmental policies.⁹⁷ Instead, to deal with the mounting environmental challenges, authoritarianism “may become not only justifiable, but essential for the survival of humanity”.⁹⁸ On the other hand, both theories have been challenged. “The limits of democracy in tackling climate change” has been partially debunked by Marina Povitkina’s study which shows that democracies do tend to emit less, and that the limits to the benefits of democracy for climate change mitigation are mainly due to “the presence of corrupt institutions, which obstruct coercive capacity, extractive capacity of the state, actors’ compliance, and pro-climate policy-making”.⁹⁹ Similarly, Bruce Gilley notes that, while authoritarian environmentalism might be “more effective in producing policy outputs”,¹⁰⁰ such outputs might suffer from lack of coherence, which in turn would lead to more implementation problems compared to democratic governments.¹⁰¹

As a typical authoritarian regime, China’s Constitution is often perceived as lacking the substance required to achieve constitutionalism, due to the lack of judicial oversight over political power, democracy in its political system, amongst other deficiencies.¹⁰² Yet, it has also been argued that despite these deficiencies, authoritarian constitutions, like China’s, do serve some standard constitutional functions, such as setting up political mechanisms and practices, facilitating coordination among major institutions, and establishing

96 Stephen Haggard, ‘Inflation and stabilization’ in Gerald M. Meler (ed), *Politics and policy making in developing countries: perspectives on the new political economy* (ICS Press 1991) 233–49.

97 Philip Keefer, ‘Clientelism, credibility, and the policy choices of young democracies’ (2007) 51 *American Journal of Political Science* 804, 804–21.

98 Mark Beeson, ‘The coming of environmental authoritarianism, *Environmental Politics*’ (2010) 19 *Environmental Politics* 276, 289.

99 Marina Povitkina, ‘The limits of democracy in tackling climate change, *Environmental Politics*’ (2018) 27 *Environmental Politics* 411, 425.

100 Bruce Gilley, ‘Authoritarian environmentalism and China’s response to climate change’ (2012) 21 *Environmental Politics* 287, 287.

101 *Ibid* 297–98.

102 Stéphanie Balme and Michael W. Dowdle, ‘Introduction: Exploring for Constitutionalism in 21st Century China’ in Stéphanie Balme and Michael W. Dowdle (eds), *Building Constitutionalism in China* (Palgrave Macmillan 2009) 1–20.

overarching principles, norms and policies to shape and promote the development of law, regulatory practices and social behavior.¹⁰³ While China's Communist Party maintains absolute leadership in decision-making, it does not, and has no intention to, exercise absolute control over all matters but instead leaves ample room for "power advancement for other state apparatuses and citizens' rights" which is considered necessary for economic reforms and modernization.¹⁰⁴ When it comes to climate actions and energy transition, the commitment of the central government is embedded in China's Constitution which incorporates environmental protection and sustainable development as general principles.¹⁰⁵ Although this provides the constitutional basis for China's climate actions, the deficiencies in China's constitutionalism present a cause of the challenges faced by Chinese leaders in ensuring the implementation of national policies at the local level. One major deficiency here concerns the highly centralized, non-democratic policymaking process in which local governments and stakeholders are not involved.¹⁰⁶ This leads to *constitutional* failures because China's climate policies and actions come out of top-down rather than bottom-up decisions which often fail to consider local differences and needs, hence engendering difficulties and tensions in implementation at the local level.¹⁰⁷ Such implementation problems can also be viewed as *governance* failures for at least two interrelated reasons. One concerns the incentive and promotion mechanisms imposed by the central government on local officials such as the climate targets discussed in Section 4. Since these mechanisms and targets usually do not pay "due consideration of the costs and challenges in the implementation process", they end up inducing local authorities to form strategic alliances against implementation.¹⁰⁸ Such alliances, based on wide and strong local networks involving supervising authorities and officials

103 Tom Ginsburg and Alberto Simpser, 'Introduction: Constitutions in Authoritarian Regimes' in Tom Ginsburg and Alberto Simpser (eds), *Constitutions in Authoritarian Regimes* (Cambridge University Press 2013) 1–18; Ma Ji and Dini Sejko, 'The Protection of Foreign Investment in China Constitutional Law: An Evolving Constant' in Ngoc S. Bui, Stuart Hargreaves and Ryan Mitchell (eds), *Routledge Handbook of Constitutional Law in Greater China* (Routledge 2023) 286–99.

104 Xin He, 'The Party's Leadership as a Living Constitution in China' in Tom Ginsburg and Alberto Simpser (eds), *Constitutions in Authoritarian Regimes* (Cambridge University Press 2013) 259.

105 The Central People's Government of the People's Republic of China, 'Constitutional Law of the People's Republic of China' (*Xinhua*, 22 March 2018) Preamble and art 26.

106 See above He (n 104) 245–64.

107 Xueguang Zhou, 'The Institutional Logic of Collusion among Local Governments in China' (2010) 36 *Modern China* 47, 57.

108 *Ibid* 64–6.

in other agencies and organizations, make enforcement mechanisms futile,¹⁰⁹ constituting the second cause of governance failures. In addition, the implementation problems are also a consequence of incomplete market-oriented reforms in China's energy sector due to misaligned objectives, as discussed in Section 4. While the reforms are essential for China's energy transition, it remains to be seen how the central government will address the competing interests between climate ambitions, energy transition and economic growth and the extent to which it will reduce intervention and let the market play a major role in allocating resources and setting energy prices which properly internalize environmental costs.¹¹⁰

At the international level, it has been observed that the rigid "hierarchical structure of China's policymaking processes"¹¹¹ "leaves virtually no scope for positions to be significantly adjusted on the spot during international negotiations",¹¹² which in turn could result in "transnational governance failures".¹¹³ However, our discussion above shows that such "transnational governance failures" could be easily overcome when the top leader decides to make an international commitment. Nonetheless, as we can see from the abrupt policy shift in China in 2021, the much-admired efficiency of "environmental authoritarianism" in making international commitments shall not be confused with the actual implementation of such commitments. When it comes to implementation, the lack of consultation and deliberation from the relevant stakeholders often translate into the lack of understanding of the true significance of such commitments, while the lack of market and political mechanisms to allow "consumers and citizens to freely and fully engage in market-based and political transactions"¹¹⁴ also make it hard for the policies to be carried out as envisaged, leading instead to fits and starts, even crises.

More broadly, China's experience with climate change and energy transition also highlights the need to not just focus on international cooperation when

109 Ibid 67–73.

110 For a recent recap of China's energy market reforms, see International Monetary Fund, 'People's Republic of China: Selected Issues' (*IMF Country Reports*, 10 February 2023) 51–63.

111 Mark Beeson, 'Coming to Terms with the Authoritarian Alternative: The Implications and Motivations of China's Environmental Policies' (2018) 5 *Asia & the Pacific Policy Studies* 34, 42.

112 Björn Conrad, 'China in Copenhagen: Reconciling the "Beijing Climate Revolution" and the "Copenhagen Climate Obstinacy"' (2012) 210 *The China Quarterly* 435, 443.

113 Ernst-Ulrich Petersmann, 'Constitutional Pluralism, Regulatory Competition and Transnational Governance Failures'.

114 Armin Steinbach, 'Constitutional economics and transnational governance failures'.

it comes to multilevel governance of public goods,¹¹⁵ but also the sub-national implementations of such commitments after the conclusion of international agreements. For countries with a constitutional democracy where the sub-national governments enjoy substantive autonomy, this might be achieved through the preference of transnational governance over local or national governance once “it is established that the subsidiarity principle determines the affected and interested community to be global”.¹¹⁶ But for countries with no constitutional democracy, another mechanism might be needed to avoid implementation problems. In the context of international trade regulation, this was achieved through the incorporation of a special clause in China’s WTO Accession Protocol.¹¹⁷

2. *Administration of the Trade Regime*

(A) *Uniform Administration*

1. *The provisions of the WTO Agreement and this Protocol shall apply to the entire customs territory of China, including border trade regions and minority autonomous areas, Special Economic Zones, open coastal cities, economic and technical development zones and other areas where special regimes for tariffs, taxes and regulations are established (collectively referred to as “special economic areas”).*
2. *China shall apply and administer in a uniform, impartial and reasonable manner all its laws, regulations and other measures of the central government as well as local regulations, rules and other measures issued or applied at the sub-national level (collectively referred to as “laws, regulations and other measures”) pertaining to or affecting trade in goods, services, trade-related aspects of intellectual property rights (“TRIPS”) or the control of foreign exchange.*
3. *China’s local regulations, rules and other measures of local governments at the sub-national level shall conform to the obligations undertaken in the WTO Agreement and this Protocol.*

115 For the discussion of this concept, see Ernst-Ulrich Petersmann and Armin Steinbach, ‘Neo-Liberalism, State-Capitalism and Ordo-Liberalism: “Institutional Economics” and “Constitutional Choices” in Multilevel Trade Regulation’ (2021) 22 *The Journal of World Investment & Trade* 1.

116 See above Steinbach (n 114).

117 See above WTO n 73.

4. *China shall establish a mechanism under which individuals and enterprises can bring to the attention of the national authorities cases of non-uniform application of the trade regime.*

In 2014, China further stepped up the efforts to ensure local compliance with WTO rules with the State Council's "Notice on Further Strengthening Trade Policy Compliance Work",¹¹⁸ which is followed by the Ministry of Commerce (MOFCOM)'s "Implementation Measures for Trade Policy Compliance (Interim)".¹¹⁹ The two documents give the MOFCOM wide-ranging power to review the "regulations, normative documents and other policy measures formulated by various departments of the State Council, local people's governments at various levels and their departments concerning or affecting trade in goods, trade in services and trade-related intellectual property rights"¹²⁰ to ensure their compliance with WTO rules including China's accession commitments.¹²¹ The problem, however, is that it is still just desk review of documents and does not cover "specific administrative measures for specific administrative subjects",¹²² which means that implementation is not covered. Thus, more would be needed to deal with the gap in implementation of international commitments.

7 Concluding Thoughts

China's abrupt shift from its policy commitment to the reduction of coal use for its climate goals in 2021 provides a vivid reminder that, while climate issues are global, politics is always local. Politics is not a problem for effective implementation of climate policies in Western countries, where such policies were initially adopted in response to bottom-up demands from various local civil society groups concerned with the negative effects of climate change. However, for countries like China with a top-down decision-making process, the real challenge lies not in the formulation of climate policies but

118 The State Council of China, '国务院办公厅关于进一步加强贸易政策合规工作的通知' (*Ministry of Commerce of the People's Republic of China*, 09 June 2014).

119 The Ministry of Commerce of China, '商务部公告2014年第86号 公布《贸易政策合规工作实施办法（试行）》' (*Ministry of Commerce of the People's Republic of China*, 15 December 2014).

120 *Ibid* art 2.

121 See above The State Council of China (n 118) art 2.

122 *Ibid* art 1.

the implementation. Getting climate policies implemented at the local level can be difficult due to the misalignment of the incentives between the central and local governments, which is as much a constitutional failure as a government failure; and the lack of well-functioning market mechanisms that would respond well to market signals.

However, the policy shift should not be seen as China retreating from its climate goals. Rather, it was a temporary deviation and short-term response to one of the worst power shortages in China, which is further complicated by the impacts of the COVID-19 pandemic on the Chinese economy and the Russia-Ukraine war on global energy prices and supply. Nevertheless, the challenges China faces in balancing climate actions and energy security may well continue to drive China's incremental approach to controlling coal use and will remain a key concern in China's pursuit of climate goals.¹²³

In addition, this paper provides some broader insights on understanding the difficulties facing many developing countries. Their reluctance to take climate actions might not necessarily arise from a lack of willingness to undertake commitments at the international level. Rather, it is closely related to gaps in energy transition and governance at the domestic level, including effective tools to translate international commitments into implementation by local governments, and efficient markets to align the interests of different stakeholders in service of the common goal. Thus, a more productive approach to international cooperation on climate issues should involve a more sympathetic understanding of the constraints facing developing countries, and the supply of the necessary tool-box of best practices to help them address such governance deficits. This may also provide a way to help developing countries overcome short-term problems in the implementation of climate policies, which would in turn lead to a brighter future for all mankind.

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