

## ARTICLE

# *Mitigation and Adaptation through Environmental Impact Assessment Litigation: Rethinking the Prospect of Climate Change Litigation in China*

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### Abstract

There are two general pathways towards climate change litigation in China: tort-based litigation to hold carbon emitters accountable in civil law, and administrative litigation against the government to demand better climate regulation. While the first pathway is gaining momentum among Chinese scholars, this article argues that legal barriers to applying tort-based rules to climate change should be fairly acknowledged. The article argues that China's legal framework for environmental impact assessment (EIA) provides more openness and flexibility for the resolution of climate change disputes. Therefore, EIA-based climate lawsuits, which challenge environmental authorities for not adequately taking climate change factors into account in decision-making processes, encounter relatively fewer legal barriers, require less radical legal or institutional reform, and have greater potential to maintain existing legal orders. The regulatory effects produced by EIA-based litigation suggest that the scholarship on climate change litigation in China should take such litigation seriously because it could influence both governments and emitters in undertaking more proactive efforts. This China-based study, with a special focus on judicial practice in the largest developing country, will shine a light on China's contribution to transnational climate litigation.

**Keywords:** Tort-based litigation, EIA-based climate litigation, Regulation-litigation interaction, Chinese judicial practice, Climate change disputes

## 1. INTRODUCTION

Over the past decade, climate change litigation has emerged as an integral part of the overall climate change governance framework. According to the database developed

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by the Sabin Center for Climate Change Law at Columbia University,<sup>1</sup> more than one thousand climate change cases have been filed around the globe, with the legal basis of claims ranging from public trust, common law, human rights, to environmental impact assessment (EIA) law.<sup>2</sup> Alongside the increasing number of climate change lawsuits, there has been a considerable increase in scholarship that examines landmark climate change cases, such as *Massachusetts v. Environmental Protection Agency (EPA)*<sup>3</sup> and *Urgenda v. The Netherlands*,<sup>4</sup> analyzes the litigation profile in a particular jurisdiction or region,<sup>5</sup> and discusses the regulatory implications of climate change litigation for policy choices.<sup>6</sup>

Empirical studies of litigation in the United States (US) and elsewhere reveal that climate change litigation is dominated by causes of action based on statutory law, in which the challenging party sues the government for its failure to take climate change factors adequately into account in decision-making processes or regulatory actions.<sup>7</sup> Litigation based on EIA-related laws constitutes the majority of the cases filed against governments. In the US, the percentage of cases brought under the National Environmental Policy Act (NEPA)<sup>8</sup> and state impact assessment laws ranks the highest in number.<sup>9</sup> Among non-US cases collected from more than 30 countries, EIA laws form the basis of climate litigation in more than half.<sup>10</sup> Most of these climate change lawsuits allege that environmental impact statements fail adequately to discuss impacts of climate change in terms of mitigation or adaptation. Their litigation goals are ‘to ensure that greenhouse gas emissions and climate change impacts are routinely taken into account and adequately evaluated in planning and environmental assessment processes’.<sup>11</sup>

<sup>1</sup> United Nations Environment Programme (UNEP) & Sabin Center for Climate Change Law at Columbia Law School, *The Status of Climate Change Litigation: A Global Review* (UNEP, 2017), p. 4.

<sup>2</sup> Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: <http://climatecasechart.com>.

<sup>3</sup> *Massachusetts v. EPA*, 549 U.S. 497 (2007).

<sup>4</sup> *Stichting Urgenda v. Government of the Netherlands (Ministry of Infrastructure and the Environment)*, ECLI:NL: HR:2019:2006, Hoge Raad [Supreme Court], C/09/456689/HA ZA 13-1396. See also J. van Zeben, ‘Establishing a Governmental Duty of Care for Climate Change Mitigation: Will *Urgenda* Turn the Tide?’ (2015) 4(2) *Transnational Environmental Law*, pp. 339–57, and B. Mayer, ‘*The State of the Netherlands v. Urgenda Foundation: Ruling of the Court of Appeal of The Hague (9 October 2018)*’ (2019) 8(1) *Transnational Environmental Law*, pp. 167–92.

<sup>5</sup> D. Markell & J.B. Ruhl, ‘An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?’ (2012) 64(1) *Florida Law Review*, pp. 15–87; J. Setzer & L. Benjamin, ‘Climate Litigation in the Global South: Constraints and Innovations’ (2020) 9(1) *Transnational Environmental Law*, pp. 77–101.

<sup>6</sup> J. Peel & H. Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press, 2015), pp. 14–5.

<sup>7</sup> Markell & Ruhl, n. 5 above; J. Setzer & R. Byrnes, ‘Global Trends in Climate Change Litigation: 2019 Snapshot’, Grantham Research Institute on Climate Change and the Environment, July 2019, p. 4, available at: [https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/07/GRI\\_Global-trends-in-climate-change-litigation-2019-snapshot-2.pdf](https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/07/GRI_Global-trends-in-climate-change-litigation-2019-snapshot-2.pdf); M. Wilensky, ‘Climate Change in the Courts: An Assessment of Non-U.S. Climate Litigation’ (2015) 26(1) *Duke Environmental Law and Policy Forum*, pp. 131–79, at 131, 134.

<sup>8</sup> Sabin Center, n. 2 above.

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

<sup>11</sup> Peel & Osofsky, n. 6 above, p. 376.

For China the picture is quite different. The Sabin Center for Climate Change Law records not a single case of climate change litigation in China. This is because the database includes only cases in which the court decision would have been different if the court had not cited a fact related to climate change or a legal obligation based on a changing climate.<sup>12</sup> Yet, if a broader scope is adopted, including contractual and tortious cases related to carbon emissions, energy conservation, green finance and biodiversity conservation, then cases run into thousands.<sup>13</sup> Wang Canfa, an established environmental law professor at the China University of Political Science and Law, regards the *Gansu Grid* case<sup>14</sup> as China's first climate change case, even though neither the claimant nor the judicial decision mentioned climate change or greenhouse gas (GHG) emissions.<sup>15</sup>

This leads us to the definition and scope of climate change litigation adopted in this article. Defining climate change litigation is of significance in that it will largely decide how we see the profile and future of climate change litigation in China.<sup>16</sup> In particular, the prospects of climate change litigation in China will be shaped by the discussion of the types of climate case that will emerge, how courts will respond to climate-related claims, and how litigation will affect regulatory development on climate change. However, defining climate change litigation is challenging<sup>17</sup> because climate change is a complicated and cross-cutting issue, which affects a broad range of legal areas, including EIA law, tort law, energy law, planning law, and administrative law.<sup>18</sup> Moreover, while some cases do not mention climate change either in the party filings or court decisions, they do appear largely motivated by concerns about climate change.<sup>19</sup> In other cases climate change is mentioned, but only incidentally and seemingly without a substantive impact on the outcome of the case.

<sup>12</sup> D. Keele, 'Climate Change Litigation and the National Environmental Policy Act' (2018) 30(2) *Journal of Environmental Law*, pp. 285–309, at 295.

<sup>13</sup> A preliminary search of key words 'carbon emissions', 'energy conservation', 'green finance' and 'biodiversity conservation' in China Judgment Online (available at: <http://wenshu.court.gov.cn> (in Chinese)) shows there are about 7,200 cases; see Y. Zhao, S. Lyu & Z. Wang, 'Prospects for Climate Change Litigation in China' (2019) 8(2) *Transnational Environmental Law*, pp. 349–77, at 354.

<sup>14</sup> *Friends of Nature (FON) v. State Grid Gansu Electric Power Co* (北京市朝阳区自然之友环境研究所与国网甘肃省电力公司二审民事裁定书), Final Civil Judgment No. 679, Higher People's Court of Gansu Province, 2018. Interestingly, interviews with FON members reveal that one of the motivations for FON to bring this lawsuit was concern about climate change and GHG emissions reduction through developing renewables.

<sup>15</sup> China Biodiversity Conservation and Green Development Foundation, 'Results of the Eighth "Top Ten Public Interest Lawsuits in China" Came Out', 22 Apr. 2019, available at: <http://www.cbcdgf.org/NewsShow/4856/8369.html> (in Chinese).

<sup>16</sup> E.g., if a broad definition is adopted, including climate-driven claims, there are thousands of contract-based climate cases: Zhao, Lyu & Wang, n. 13 above, p. 354.

<sup>17</sup> J.B. Ruhl, 'What is Climate Change Law?', *OUPblog*, 22 Aug. 2015, available at: <http://blog.oup.com/2015/08/what-is-climate-change-law>.

<sup>18</sup> J. Peel & H. Osofsky, 'Climate Change Litigation's Regulatory Pathways: A Comparative Analysis of the United States and Australia' (2013) 35(3) *Law and Policy*, pp. 150–83, at 150, 153.

<sup>19</sup> E.g., *FON v. State Grid Gansu Electric Power Co.*, n. 14 above, and *FON v. State Grid Ningxia Electric Power Co.* (pending) are related to renewable energy law.

This article argues that climate change litigation as a field of practice<sup>20</sup> needs a threshold definition to distinguish itself from broader, climate change-related litigation. Therefore, the article adopts the comparatively narrow definition of climate change litigation originally proposed by Markell and Ruhl.<sup>21</sup> Climate change litigation in this article refers to any litigation in which the substance or policy of climate change causes and impacts are raised in issues of fact or law, either in the party filings or court decisions. Climate change issues (equivalent keywords include mitigation, adaptation, GHG emissions, sea level rise, and so on) do not have to be central to the dispute or argument, but need to be directly or expressly raised. This restricted definition helps us to focus on the core aspects of climate change litigation – namely, the legal arguments, the legal reasoning, and the influence on climate policy and regulatory development.<sup>22</sup> The mere mention of climate change or its equivalent keywords does not amount to a ‘climate change case’ if climate change issues do not inform the claims or court decisions. For example, an intellectual property dispute between a company holding a technology related to climate change and the intellectual property office does not count as ‘climate change litigation’.<sup>23</sup> Cases that seek results which can have beneficial climate change impact (such as developing renewable energies, reducing air pollution from coal-fired power plants, and improving adaptive capacity) but which do not refer to climate change or its equivalent keywords are also excluded.

While scholarship on climate litigation is concentrated principally in developed countries like the US, Australia and European states,<sup>24</sup> the scholarly discussion of the role of litigation in promoting China’s climate change governance is emergent. This China-based study increases our understanding of how the role of domestic courts in transnational climate governance and the initial trends of climate litigation in China are different from those in other jurisdictions. The strategies and legal grounds developed in China’s climate litigation practice might also be able to contribute to the burgeoning body of transnational climate change litigation. There are three different litigation pathways discussed by Chinese scholars: (i) tort liability litigation for compensation; (ii) public interest litigation against emitters of GHGs; and (iii) administrative litigation against the government for better climate regulation.<sup>25</sup> The first two types

<sup>20</sup> Setzer & Byrnes, n. 7 above; G. Nosek, ‘Climate Change Litigation and Narrative: How to Use Litigation to Tell Compelling Climate Stories’ (2018) 42(3) *William & Mary Environmental Law and Policy Review*, pp. 733–803, at 798; J. Peel, ‘Issues in Climate Change Litigation’ (2011) 5(1) *Carbon & Climate Law Review*, pp. 15–24, at 17.

<sup>21</sup> Markell and Ruhl define climate change litigation as ‘any piece of federal, state, tribal, or local administrative or judicial litigation in which the party filings or tribunal decisions directly and expressly raise an issue of fact or law regarding the substance or policy of climate change causes and impacts’: Markell & Ruhl, n. 5 above, p. 27.

<sup>22</sup> J. Lin, ‘Climate Change Litigation in Asia and the Pacific’, in G. Van Calster, W. Vandenberghe & L. Reins (eds), *Research Handbook on Climate Change Mitigation Law* (Edward Elgar, 2015), pp. 578–600, at 579.

<sup>23</sup> E.g., *Chen Xijun v. National Intellectual Office Patent Reexamination Board* (陈希军与国家知识产权局专利复审委员会二审行政判决书), Final Administrative Judgment No. 2968, 2018, Higher People’s Court of Beijing.

<sup>24</sup> J. Setzer & L. Vanhala, ‘Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance’ (2019) 10(3) *WIREs Climate Change* online articles, pp. 1–19, at 5, available at: <https://onlinelibrary.wiley.com/doi/abs/10.1002/wcc.580>.

<sup>25</sup> Zhao, Lyu & Wang, n. 13 above; B. Tan, ‘The Institutional Construction of China’s Administrative Litigation on Climate Change: Climate Governance through Litigation’ (我国气候变化行政诉讼制度

of litigation, both of which are tort-based, attract the most scholarly attention largely because of the prodigious legal developments and litigation in the area of environmental tort law and public interest litigation.<sup>26</sup> Scholars also regard tort-based climate litigation as the main prospect for the development of climate change litigation in China.<sup>27</sup> In contrast, I argue that Chinese climate change litigation on the basis of administrative law, especially EIA laws, is potentially a more productive pathway for climate litigation in China.

This article contends that significant legal and policy barriers to applying tort-based provisions to climate change make tort-based climate litigation in China elusive. It proposes that EIA-based climate litigation could serve as an alternative as a result of the flexibility of the legal framework of EIA. The interaction between regulation and litigation also indicates the important prospects of EIA-based litigation, which deserve more legal analysis. To reach that conclusion, Section 2 will first explain how climate change litigation and its role in Chinese climate governance should be examined. The status of climate legislation, the duty of environmental agencies, and the role of the courts are all distinctive in the Chinese context. Section 3 explores the potential of EIA-based climate litigation firstly by analyzing the legal possibility of regulating climate change through China's EIA-related laws. It then explains other crucial factors that contribute to the prospect of EIA-based climate litigation, such as relaxed standing requirements, emergent public interest litigation against government authorities, and numerous precedents for EIA-based litigation. In Section 4 the article analyzes the challenges faced by tort-based climate litigation in the form of the significant legal barriers to standing and proving causation, as well as policy barriers to suing state-owned enterprises. The final section concludes.

## 2. UNDERSTANDING CLIMATE CHANGE LITIGATION IN THE CHINESE CONTEXT

### 2.1. *The Role of Climate Change Litigation in China's Climate Governance*

As a global challenge, climate change is better addressed by a combination of international efforts based on enforceable legal agreements and the adoption of national

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之构建——通过司法的气候治理) (2017) 4 *Dong Yue Tribune*, pp. 161–70; Q. Zhang, 'Towards a Breakthrough in China's Climate Change Litigation: Environmental Public Interest Litigation Filed by NGOs', in X. He, H. Zhang & A. Zahar (eds), *Climate Change Law in China in Global Context* (Routledge, 2020), pp. 162–87; C. Zhou, 'Addressing Dilemmas over Climate Change Litigation in China' (2019) 49(2) *Hong Kong Law Journal*, pp. 719–48.

<sup>26</sup> Since 2013 there has been significant development in these two areas. The Civil Procedure Law amended in 2013 granted related authorities and organizations the standing to bring civil public interest litigation. Environmental non-governmental organizations (NGOs) are legally entitled to bring actions against polluters in the environmental public interest under the 2014 Environmental Protection Law. This follows two instances of judicial interpretation in environmental tort litigation and environmental public interest litigation respectively. There are also legal developments in public interest litigation brought by the procurators. Academic research on this is thriving: e.g., X. Wang, 'The Legislative Order of Environmental Public Interest Litigation' (论环境公益诉讼制度的立法顺序) (2016) 6 *Qinghua Faxue*, pp. 101–14; R. Zhang & B. Mayer, 'Public Interest Environmental Litigation in China' (2017) 1(2) *Chinese Journal of Environmental Law*, pp. 202–28.

<sup>27</sup> Zhao, Lyu & Wang, n. 13 above; Zhang, n. 25 above; Zhou, n. 25 above.

legislation prescribing mitigation targets and government planning for climate change. Climate change is both a global and a small-scale, local and immediate issue.<sup>28</sup> It requires responses at all levels of government and produces legal disputes among individuals, emitters, and government entities that need to be resolved through an independent judiciary. Litigation was not regarded as a conventional approach to climate governance, yet its significance now receives increasing political and legal attention around the globe,<sup>29</sup> especially following some high-profile climate change cases, which have significantly reshaped the contours of climate change regulation.<sup>30</sup>

Many scholars explain the emergence of climate change litigation as a response to the institutional failures associated with climate change legislation or regulation.<sup>31</sup> Courts, as forums for the interpretation and enforcement of the law, are either required to reinterpret long-standing environmental statutes to cover emerging climate change concerns, or are being used strategically for wider regulatory or policy change.<sup>32</sup> While the former development can be observed across different legal jurisdictions, the latter manifests mainly in political regimes that are characterized by adherence to the separation of powers doctrine and have an active, independent judiciary. In both the US and Australia, where climate change lawsuits have proliferated, the absence of comprehensive legislation on climate change has been a key driver for litigants to turn to the courts and seek redress for harm caused by climate change, or petition for more ambitious government action.<sup>33</sup> Citizens affected by climate change impacts go to court for

<sup>28</sup> K. Bouwer, 'The Unsexy Future of Climate Change Litigation' (2018) 30(3) *Journal of Environmental Law*, pp. 483–506, at 486.

<sup>29</sup> E.g., Peel & Osofsky, n. 6 above, pp. 9–15 (filling regulatory gaps; as an element of multidimensional climate governance; shaping smaller-scale decision making); E. Fisher, 'Climate Change Litigation, Obsession and Expertise: Reflecting on the Scholarly Response to *Massachusetts v. EPA*' (2013) 35(3) *Law and Policy*, pp. 236–60 (a response to institutional failure; judicial reasoning provides authority for acting in response to climate change problems; and litigation is a forum for co-producing a physical and social understanding of climate change); B. Preston, 'The Contribution of the Courts in Tackling Climate Change' (2016) 28(1) *Journal of Environmental Law*, pp. 11–7 (providing equal access to justice; determining and not deferring climate change claims; upholding the rule of law; taking action and forcing the executive, legislature and private sector to take climate change seriously; explaining and upholding the fundamental values underpinning the law; promoting environmental values and putting a price on them; assisting the progressive and principled development of climate change law and policy; and making reasoned and evidence-based decisions).

<sup>30</sup> E.g., in *Massachusetts v. EPA*, n. 3 above, the Supreme Court ruled that the EPA has authority under the Clean Air Act to regulate vehicle tailpipe GHG emissions. In *Urgenda*, n. 4 above, the Hague District Court ordered the Dutch state to limit GHG emissions to 25% below 1990 levels by 2020, finding the government's existing pledge to reduce emissions by 17% insufficient to meet the state's fair contribution towards the UN goal of keeping global temperature increases within 2 degrees Celsius of pre-industrial levels. The Court concluded that the state has a duty to take climate change mitigation measures on the ground of the 'severity of the consequences of climate change and the great risk of climate change occurring. This is the first decision by any court in the world in which a state was ordered to limit GHG emissions for reasons other than statutory mandates.

<sup>31</sup> H.M. Osofsky, 'The Continuing Importance of Climate Change Litigation' (2010) 1 *Climate Law*, pp. 3–29, at 5; Fisher, n. 29 above, p. 236.

<sup>32</sup> Peel & Osofsky, n. 6 above, p. 30.

<sup>33</sup> T. Okonkwo, 'Protecting the Environment and People from Climate Change through Climate Change Litigation' (2017) 10(5) *Journal of Politics and Law*, pp. 66–77, at 67–8.

redress or for more effective risk regulation.<sup>34</sup> Non-governmental organizations (NGOs) and activists may perceive the court as a battlefield to complement their lobbying campaigns in the hallways of legislative chambers and executive agencies.<sup>35</sup> For example, environmental NGOs in the US frequently sue governmental agencies for failing to exercise or inadequately exercising their authority to regulate for climate change.<sup>36</sup>

However, the involvement of courts in climate governance is very different in China from that of courts in western countries. Firstly, in China the government at various levels steers climate governance by formulating climate policies, setting national and local mitigation targets, establishing regulatory frameworks, and supervising market activities.<sup>37</sup> This state-controlled, policy-oriented climate governance leaves courts, as judicial organs of the state, with comparatively less space for dispute settlement than is the case in the US or Australia. Nevertheless, this dynamic is changing because of the increasing involvement of market actors and civil society in climate governance in recent years.<sup>38</sup> Chinese courts will face the challenge of dealing with the legally disruptive nature of climate change,<sup>39</sup> and will need to adjudicate legal disputes on climate change without undermining legal stability and coherence.

Secondly, despite judicial reform and the progress made towards a more competent, professional and independent judiciary,<sup>40</sup> judicial power in China is still susceptible to the overarching authority of the Chinese Communist Party (CCP) in many respects.<sup>41</sup> Therefore, courts may have limited room to make new judicial interpretations or to steer regulatory change on climate issues unless their decisions accord with the political objectives and priorities of the CCP. Climate change claims in China are thus more likely to be brought by qualified parties on the basis of existing laws, which require the court to play its essential role of enforcing and interpreting the law and regulations.

Climate change litigation provides a vital opportunity for the courts to examine whether climate change actions can be justified on the basis of existing regulatory frameworks or use judicial review to examine whether administrative actions or decisions are climate-friendly.<sup>42</sup> In the climate change area, judicial review is essential to

<sup>34</sup> P. Luff, 'Risk Regulation and Regulatory Litigation' (2011) 64(1) *Rutgers Law Review*, pp. 73–115, at 79.

<sup>35</sup> J. Lin, 'Climate Change and the Courts' (2012) 32(1) *Legal Studies*, pp. 35–57, at 37.

<sup>36</sup> D. Markell & J.B. Ruhl, 'An Empirical Survey of Climate Change Litigation in the United States' (2010) 40(7) *Environmental Law Reporter*, pp. 10644–55, at 10649.

<sup>37</sup> P. Wang, L. Liu & T. Wu, 'A Review of China's Climate Governance: State, Market and Civil Society' (2018) 18(5) *Climate Policy*, pp. 664–79, at 665.

<sup>38</sup> *Ibid.*

<sup>39</sup> E. Fisher, E. Scotford & E. Barritt, 'The Legally Disruptive Nature of Climate Change' (2017) 80(2) *The Modern Law Review*, pp. 173–201, at 174.

<sup>40</sup> F. Lin, 'The Future of Judicial Independence in China', Centre for Judicial Education and Research, City University of Hong Kong Working Paper Series No. 2, May 2016, pp. 1–2, available at: [https://www.cityu.edu.hk/cjer/lib/doc/paper/WK2\\_The\\_Future\\_of\\_Judicial\\_Independence\\_in\\_China.pdf](https://www.cityu.edu.hk/cjer/lib/doc/paper/WK2_The_Future_of_Judicial_Independence_in_China.pdf).

<sup>41</sup> L. Li, 'The Chinese Communist Party and People's Courts: Judicial Dependence in China' (2016) 64(1) *The American Journal of Comparative Law*, pp. 37–74, at 72.

<sup>42</sup> J. Ye, *Climate Change Governance and Law* (气候变化治理与法律) (National Taiwan University Press, 2015), p. 402.



ensure that climate change-related actions do not undermine existing legal orders (for example, by infringing private property in the pursuit of carbon reduction goals), or that administrative decisions do not contravene predetermined goals of reducing GHG emissions and preventing climate change risks. In China, while government-made regulations and policies are exempt from the scope of judicial review,<sup>43</sup> courts can examine specific government decisions with reference to existing regulation and procedural law. For example, courts can check whether government authorities have facilitated the integration of GHG mitigation or adaptation while granting EIA approval for a proposed project. There are concerns that litigation against regulatory authorities is unrealistic because Chinese laws do not clearly stipulate a governmental duty to reduce GHG emissions or undertake certain adaptation measures, and because, generally, the judiciary is subservient to the executive.<sup>44</sup> This article argues that an obligation to reduce GHG emissions and adapt could be derived from laws such as the Law on Air Pollution Prevention and Control (LAPPC) and the Environmental Impact Assessment Law (EIA Law). With regard to concerns about judicial independence, I agree with Cohen that ‘judicial independence is not something that simply exists or does not exist’.<sup>45</sup> The degree of judicial independence is highly contingent on the case concerned and requires a more nuanced discussion, which disaggregates judicial independence into various subcomponents and examines each in turn.<sup>46</sup> As Stern’s empirical study shows, Chinese judges enjoy a fluctuating degree of autonomy in environmental lawsuits.<sup>47</sup> In low-profile, run-of-the-mill cases their discretion stems from uneven application of the law, legal lacunas, and the ambiguity of underlying political goals.<sup>48</sup>

## 2.2. *The Role of the Supreme People’s Court in Shaping the Prospects of Chinese Climate Change Litigation*

The prospects, profile and development of climate change cases in China are also determined by how the Supreme People’s Court (SPC), the highest court in China, issues judicial interpretations and guides cases. Over the past decade, the SPC has evolved into an increasingly influential political actor in national law and policymaking by being responsive to policy change and sensitive to lawmaking opportunities.<sup>49</sup> In response to the high levels of generality and ambiguity of national legislation, the

<sup>43</sup> According to Art. 13 of the Administrative Litigation Law (amended in 2017), laws, regulations and departmental rules are exempt from judicial review in China.

<sup>44</sup> Zhao, Lyu & Wang, n. 13 above, p. 365.

<sup>45</sup> J. Cohen, ‘The Chinese Communist Party and “Judicial Independence”: 1949–1959’ (1969) 82(5) *Harvard Law Review*, pp. 967–1006, at 972.

<sup>46</sup> R. Peerenboom, ‘Judicial Independence in China: Common Myths and Unfounded Assumptions’, in R. Peerenboom (ed.), *Judicial Independence in China: Lessons for Global Rule of Law Promotion* (Cambridge University Press, 2010) pp. 69–94, at 70.

<sup>47</sup> R. Stern, ‘On the Frontlines: Making Decisions in Chinese Civil Environmental Lawsuits’ (2010) 32(1) *Law and Policy*, pp. 79–103, at 84.

<sup>48</sup> *Ibid.*, p. 85.

<sup>49</sup> E.C. Ip, ‘The Supreme Court and the Making of Public Policy in Contemporary China’ (2010) 7 *Michigan Journal of Public Affairs*, pp. 1–15, at 1.



SPC frequently exercises its judicial power by issuing judicial interpretation on particular questions arising out of the specific application of law in a high-profile manner.<sup>50</sup> As China undergoes unprecedented social and economic change, the Chinese judiciary is often required to play an active role by providing judicial services to help the government in achieving certain policy goals.<sup>51</sup> As a result, judicial interpretation often goes beyond the mechanical application of legal rules to cater for social needs.<sup>52</sup>

In some areas the SPC alters the legal landscape and reshapes the relationship between state and society, and between diverse interests and values, by expanding or amending legal provisions.<sup>53</sup> For example, given the heavy burden of proof imposed on polluters in Chinese tort law,<sup>54</sup> the judicial interpretation of environmental tort liability shows efforts to alleviate this burden through changing rules of evidence, causation and liability.<sup>55</sup> The recent reform of the case-guidance system is another example of the SPC being judicially active. It shows very clear attempts ‘to summarize adjudication experiences, unify the application of law, enhance adjudication quality, and safeguard judicial impartiality’.<sup>56</sup> By implementing the principle of ‘treating like cases alike’ and regulating judicial discretion, case-guidance reform seeks to promote more adjudicative consistency, predictability, judicial efficiency and integrity.<sup>57</sup> Although not yet formally binding in China and not an independent source of law, the guiding cases serve as a necessary aid for judicial reasoning in lower courts.<sup>58</sup> Furthermore, the adjudication outcomes and legal rules derived from these cases deliver important messages to potential claimants with similar disputes.

The SPC, in 2016, issued a judicial policy that the judiciary should fully embrace its role of addressing climate change and advancing climate governance in areas of carbon emissions trading, energy conservation, green finance, and biodiversity

<sup>50</sup> C. Ding, ‘Judicial Activism of Provincial Courts in China: Medical Negligence Law as a Case Study’ (2019) 7(3) *The Chinese Journal of Comparative Law*, pp. 505–36, at 506.

<sup>51</sup> Q. Li, ‘Judicial Restraint or Judicial Initiative: China’s Judicial Initiative under the Guidance of Public Policy’ (司法克制抑或司法能动——兼论公共政策导向下的中国司法能动) (2012) 3(19) *Studies in Law and Business*, pp. 85–93, at 87.

<sup>52</sup> C. Wang, ‘Law-Making Functions of the Chinese Courts: Judicial Activism in a Country of Rapid Social Changes’ (2006) 1(4) *Frontiers of Law in China*, pp. 524–49, at 524.

<sup>53</sup> Y. Song, ‘How Does Public Policy Enter the Judging Process: The Example of SPC’s Judicial Interpretation’ (公共政策如何进入裁判过程——以最高人民法院的司法解释为例) (2009) 6 *Studies in Law and Business*, pp. 111–21, at 114.

<sup>54</sup> According to the 2009 Tort Law, the polluter assumes the burden of proving that there is no causation between its conduct and the harm: Tort Law, 2009, Art. 66. The same rule relating to burden of proof is stipulated in China’s Civil Code, enacted in 2021. To avoid confusion, this article still uses the Tort Law for analysis.

<sup>55</sup> SPC, Interpretation of the Supreme People’s Court of Several Issues on the Application of Law in the Trial of Disputes over Liability for Environmental Torts (最高人民法院于审理环境侵权责任纠纷案件适用法律若干问题的解释), Interpretation No. 12, 2015.

<sup>56</sup> SPC, Adjudication Committee, Provisions of the Supreme People’s Court concerning Work on Case Guidance (最高人民法院于案例指导工作的规定), 26 Nov. 2010.

<sup>57</sup> M. Jia, ‘Chinese Common Law? Guiding Cases and Judicial Reform’ (2016) 129(8) *Harvard Law Review*, pp. 2213–34, at 2233; J. Deng, ‘The Guiding Case System in China’s Mainland’ (2015) 10(3) *Frontiers of Law in China*, pp. 449–74, at 454; V.I. Lo, ‘Towards the Rule of Law: Judicial Lawmaking in China’ (2016) 28(2) *Bond Law Review*, pp. 149–68, at 155.

<sup>58</sup> Jia, *ibid.*, p. 2224.

conservation.<sup>59</sup> Although cases on these issues do not necessarily constitute climate change litigation as defined in this article, they show that legal disputes related to climate change are emerging and the SPC is desirous to make its judicial contribution to climate governance. When social, political or legal circumstances necessitate the adoption of judicial interpretations or case guidance to resolve climate change disputes, the SPC's vision will shape the profile of climate change litigation and pathways for addressing climate change. The SPC distinguishes between judicial citations of civil and administrative adjudication in one of its judicial interpretations.<sup>60</sup> Judges in an administrative court can cite comparatively more sources of law for judicial reasoning – including the interpretation of administrative rules or regulations promulgated by the State Council or its authorized departments – than can judges in civil disputes. Consequently, climate change-related claims will have a greater possibility of being fielded and proceeding to administrative litigation.

### 2.3. Using the Regulation-Litigation Linkage to Analyze Climate Litigation

The regulatory impact of climate lawsuits in other countries underlines the importance of analyzing the interaction between litigation and regulation, regardless of whether litigation is retrospective or constructive.<sup>61</sup> On the one hand, as a civil law system with a strong focus on implementing legislation, Chinese courts typically rely on positive law to decide whether they may hear specific claims and how they could adjudicate. As a result, the profile of climate change litigation will be decided largely by whether existing law and regulation favour claims against the government for regulatory change, or whether they favour claims against private parties for tortious liability. On the other hand, the judicial interpretation or application of existing law and regulation in the court's reasoning produces regulatory effects that could further reshape regulatory pathways for addressing climate change.<sup>62</sup>

Firstly, this article argues that both civil liability litigation and public interest litigation against carbon emitters will encounter insurmountable legal barriers in the climate change arena in China. In contrast, the legal framework of EIA has greater potential as a basis for climate change cases in China. This is not simply because litigation against EIA for inadequate climate change consideration is becoming a global trend; rather, China's environmental law provides greater flexibility and legal potential for such claims to proceed. Litigation against government authorities to ensure that GHG and climate change impacts are routinely considered and adequately evaluated in their EIA decisions could stimulate more *ex ante* action by both improving governmental decision making and incentivizing emitters to adopt efficient preventive measures.

<sup>59</sup> SPC, Opinions on Giving Full Play to the Role of Judicial Functions to Provide Judicial Services and Guarantees for Promoting Ecological Civilization Construction and Green Development (关于充分发挥审判职能作用为推进生态文明建设与绿色发展提供司法服务和保障的意见), 2016.

<sup>60</sup> SPC, The Regulation on Citation of Law, Regulations and other Normative Documents in Judgments (最高人民法院关于裁判文书引用法律、法规等规范性文件的规定), 2009.

<sup>61</sup> Peel & Osofsky, n. 18 above, p. 151.

<sup>62</sup> Peel & Osofsky, n. 6 above, pp. 35–53.

Although the civil liability of GHG emitters *ex post* could potentially inspire corporate behavioural change in order to avoid unwelcome litigation consequences<sup>63</sup> and, in some cases, civil liability may encourage further regulation,<sup>64</sup> litigation against the government could promote the adoption of a more proactive and efficient regulatory approach towards climate change.

### 3. LITIGATING CLIMATE CHANGE THROUGH EIA: FROM REGULATION TO LITIGATION

#### 3.1. *Regulating Climate Change through EIA: A Global Trend and National Practice*

As a cross-cutting issue, climate change intersects with multiple levels of government and areas of environmental law and regulation. Therefore, it entails a mainstreaming approach that integrates climate change factors within ongoing planning and decision-making processes.<sup>65</sup> The advantages of adopting a mainstreaming approach to the implementation of climate change policy are apparent as it avoids policy decisions being subject to inevitable political compromise and judicial challenge.<sup>66</sup> The EIA, a well-established environmental decision-making tool designed to embed environmental stewardship within project development,<sup>67</sup> is a promising starting point for such a mainstreaming approach. Many development plans and projects are subject to EIA requirements, which underlines the significance of EIA in minimizing GHG emissions and adapting to the changing climate at the level of the specific plan or project.<sup>68</sup>

The EIA regime is a particularly apposite place to discuss climate change and related litigation. A growing number of theoretical and empirical studies explore the potential of EIA both to assess the climate change impacts of a proposed project with regard to its GHG emissions (mitigation) and to gauge the impacts of climate change on a proposed

<sup>63</sup> S. Hsu, 'A Realistic Evaluation of Climate Change Litigation through the Lens of a Hypothetical Lawsuit' (2008) 79(3) *University of Colorado Law Review*, pp. 701–66, at 717.

<sup>64</sup> K. Viscusi, 'Regulation of Health, Safety, and Environmental Risks', in A.M. Polinsky & S. Shavell (eds), *Handbook of Law and Economics* (Elsevier, 2007) pp. 591–645, at 594.

<sup>65</sup> R.J.T. Klein et al., 'Portfolio Screening to Support the Mainstreaming of Adaptation to Climate Change into Development Assistance' (2007) 84 *Climatic Change*, pp. 23–44.

<sup>66</sup> C.W. Christopher, 'Success by a Thousand Cuts: The Use of Environmental Impact Assessment in Addressing Climate Change' (2008) 9 *Vermont Journal of Environmental Law*, pp. 549–613, at 604.

<sup>67</sup> Established by the US 1969 NEPA, EIA serves as a systematic and integrative system that requires federal agencies to analyze and disclose the significant environmental impacts of proposed actions and the comparative impacts associated with reasonable alternatives to proposed actions. It forces agencies to integrate environmental concerns in decision making, facilitates public participation in governmental decision making, and encourages mitigation and self-policing. The influence of EIA is far-reaching, and its basic principles have been adopted extensively in the rest of the world, although with divergent legislation, institutional arrangements and implementation; see J.B. Ruhl et al., *The Practice and Policy of Environmental Law*, 4<sup>th</sup> edn (Foundation Press, 2017), p. 472; L.G. Wishnie, 'NEPA for a New Century: Climate Change and the Reform of the National Environmental Policy Act' (2008) 16(3) *New York University Environmental Law Journal*, pp. 628–54, at 629.

<sup>68</sup> M.T.J. Kok & H.C. Coninck, 'Widening the Scope of Policies to Address Climate Change: Directions for Mainstreaming' (2007) 10(7/8) *Environmental Science and Policy*, pp. 587–99.

project (adaptation).<sup>69</sup> This is significant given the multi-scalar nature of climate change. The causes of climate change are globally distributed and require multi-level responses at the international, national, local, and individual levels.<sup>70</sup> EIA is already a familiar process for many national governments, and the EIA of a proposed activity on climate change is an emerging norm of customary international law.<sup>71</sup> A focus on EIA therefore has great potential to build a bridge between global aspirations and local actions,<sup>72</sup> and to bring about global solutions by recasting existing international and domestic norms on climate change. Many jurisdictions also have extended the coverage of their EIA regime to include climate change factors through the interpretation and revision of existing EIA laws.<sup>73</sup> Canada, for example, adopted practical guidance in 2003 to advise on the consideration of climate change factors in the EIA process.<sup>74</sup> EU Directive 2014/52/EU clarifies that the information for the EIA report should include the impact of the project on the climate (such as the nature and magnitude of GHG emissions) and the vulnerability of the project to climate change.<sup>75</sup> The US Council on Environmental Quality (CEQ) issues guidance to federal agencies on how to assess GHG emissions and the effects of climate change in environmental reviews under the NEPA.<sup>76</sup> Several US courts have confirmed that climate change is a legitimate environmental issue which must be addressed by a government agency when conducting an environmental assessment required by the NEPA.<sup>77</sup>

These legislative developments are also advocated by a number of international organizations. For example, the Organisation for Economic Co-operation and Development (OECD) has sought to develop climate-resilient projects by identifying the opportunities and challenges of incorporating adaptation within the EIA process.<sup>78</sup>

<sup>69</sup> E.g., Christopher, n. 66 above; Wishnie, n. 67 above; D. Owen, 'Climate Change and Environmental Assessment Law' (2008) 33(1) *Columbia Journal of Environmental Law*, pp. 57–119; K.T. Haroff & K.K. Moore, 'Global Climate Change and the National Environmental Policy Act' (2007) 42(1) *University of San Francisco Law Review*, pp. 155–84.

<sup>70</sup> Peel & Osofsky, n. 6 above, p. 13.

<sup>71</sup> B. Mayer, 'Climate Assessment as an Emerging Obligation under Customary International Law' (2019) 68(2) *International and Comparative Law Quarterly*, pp. 271–308, at 274.

<sup>72</sup> Christopher, n. 66 above, p. 606.

<sup>73</sup> Mayer, n. 71 above, p. 282.

<sup>74</sup> The Federal-Provincial-Territorial Committee on Climate Change and Environmental Assessment, *Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners* (Canadian Environmental Assessment Agency, 2003).

<sup>75</sup> Directive 2014/52/EU amending Directive 2011/92/EU on the Assessment of the Effects of Certain Public and Private Projects on the Environment [2014] OJ L 124/1, Art. 3(1)c.

<sup>76</sup> CEQ, 'Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews', 81 *Federal Register* 51866 (5 Aug. 2016). Under the Trump Administration, the CEQ issued a new draft guidance: 'Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions', 84 *Federal Register* 30097 (26 June 2019).

<sup>77</sup> *Border Power Plant Working Group v. DOE*, 260 F. Supp. 2d 997 (S.D. Cal. 2003); *Sierra Club v. Federal Energy Regulatory Commission*, 867 F.3d 1357 (D.C. Cir. 2017); *Center for Biological Diversity v. U.S. Bureau of Land Management*, No. 3:17-cv-00553, (D. Nev. Aug. 23, 2017); *High Country Conservation Advocates v. U.S. Forest Service*, 52 F. Supp. 3d 1174, 1192 (D. Colo. 2014).

<sup>78</sup> S. Agrawala et al., *Incorporating Climate Change Impacts and Adaptation in Environmental Impact Assessments: Opportunities and Challenges* (OECD, 2011).

The 2017 conference theme of the International Association of Impact Assessment (IAIA) was the contribution of EIA to global efforts in addressing climate change.<sup>79</sup> These developments show that climate change could be regulated by expanding or reinterpreting existing legal frameworks on EIA. This has become a global trend and, for many countries, now reflects national practice.

Furthermore, as a legal mechanism EIA has compelling advantages for regulating climate change. While most approaches to climate change focus exclusively either on mitigation or adaptation, EIA conducted at project level can combine both objectives in one decision-making process. Firstly, project proponents may be motivated to assess both the impacts on climate change and the impacts of climate change. As cases that challenge EIA decisions for failing to assess climate change factors or disclose such information to the public could significantly delay a project, proponents of the project may wish to take necessary measures to minimize the likelihood of litigation.<sup>80</sup> On the adaptation side, identifying and evaluating the changing environmental baseline and long-term environmental risks induced by climate change could generate more precise information for project proponents and lower the risk of maladaptation. Appropriate adaptive measures will make projects more resilient and save valuable financial resources in the event of extreme events caused by climate change.

Secondly, governmental authorities may be motivated to take climate change into consideration in their EIA decisions because climate change may either influence the achievement of designated mitigation goals or influence the surrounding environment in a way that undermines the purpose of the proposed project. The transparency and participation requirements of the EIA process also provide a collaborative mechanism through which other government agencies, stakeholders, and the public can learn about the impacts or risks of climate change and the necessity to adopt resilient solutions.<sup>81</sup>

### *3.2. Regulating Climate Change through EIA Laws in China: Exploring the Legal Basis for EIA-based Climate Litigation*

*Exploring the legal potential of regulating climate change in China's EIA-related laws*

EIA has served as a key regulatory instrument to prevent and mitigate negative environmental impacts in China. The concept and practice of EIA in China can be traced back to the 1970s. It was first articulated in the 1979 Environmental Protection Law (Trial Implementation) (EPL), and then restated in the 1989 EPL. China promulgated its first stand-alone EIA Law in 2002, a landmark for its EIA legal framework in terms of stipulating planning-level EIA and public participation. However, various legislative deficiencies in the 2002 EIA Law and the enforcement gap in practice meant that the

<sup>79</sup> IAIA17, 'Impact Assessment's Contribution to the Global Efforts in Addressing Climate Change', 4–7 Apr. 2017, available at: <https://conferences.iaia.org/2017/index.php>.

<sup>80</sup> Peel & Osofsky, n. 6 above, p. 45.

<sup>81</sup> J. Wentz, *Assessing the Impacts of Climate Change on the Built Environment under NEPA and State EIA Laws: A Survey of Current Practices and Recommendations for Model Protocols* (Sabin Center for Climate Change Law, 2015), p. i.

EIA regime failed to prevent and mitigate environmental pollution.<sup>82</sup> In response to the poor efficacy of EIA, the Chinese government closed legislative loopholes, increased penalties, and improved public participation by amending the EPL in 2014 and the EIA Law in 2016 and 2018.<sup>83</sup>

Climate change has been at the periphery of mainstream environmental law in China. Although there are regulations on specific issues like emissions trading or GHG reduction, most of them are of low priority and have little binding effect.<sup>84</sup> This is largely because addressing climate change requires the government to act now to address long-term and, in some cases, uncertain threats,<sup>85</sup> and also because the effects of climate governance have limited visibility for the public and therefore contribute little to the legitimacy of the Chinese government.<sup>86</sup> More specifically, although climate change is recognized as an environmental problem, neither the recently amended EPL nor the new EIA Law clarifies that climate change is a legitimate environmental issue that should be addressed by project proponents or government agencies in the EIA process. For example, the EPL does not extend the definition of ‘environment’ to cover climate change as the EU does in its Directive. As a result, projects that emit GHGs or are vulnerable to climate change are not directly subject to EIA requirements. However, this does not mean that China’s regulatory framework of EIA provides no room for climate change considerations.

China’s EIA laws do not traditionally consider climate change to be an ‘environmental impact’ that should be assessed, but they have the legal potential to be extended to climate change assessment. For example, Article 17 of the EIA Law stipulates that environmental impact statements are to include information about the surrounding

<sup>82</sup> The 2002 EIA Law allowed project developers to supplement EIA if they were found not to have had an assessment before project construction. This was as a major weakness in the EIA regime in that it undermined the whole logic behind the EIA process.

<sup>83</sup> For more detailed discussion of EIA laws and their recent reform see X. He, ‘In the Name of Legitimacy and Efficiency: Evaluating China’s Legal Reform on EIA’ (2020) 32(3) *Journal of Environmental Law*, pp. 441–69.

<sup>84</sup> Some key examples are National Development and Reform Commission of the State Council (NDRC), ‘The Working Plan of Controlling GHGs Emission during the 13<sup>th</sup> Five-Year Plan’(“十三五”控制温室气体排放工作方案), No. 61, 2016; NDRC, ‘Interim Measures for the Administration of Carbon Emission Trading’ (碳排放权交易管理暂行办法), No. 17, 2014; NDRC, The Plan for Constructing the National Emissions Trading Scheme (Electricity Generation Sector)’ (全国碳排放权交易市场建设方案(发电行业)), No. 2191, 2017; NDRC, ‘National Strategy of Climate Change Adaptation’ (国家适应气候变化战略), No. 2252, 2013; NDRC, ‘National Climate Change Program (2014–2020)’ (国家应对气候变化规划(2014–2020年)), No. 2347, 2014.

<sup>85</sup> D. Bodansky, J. Brunnée & L. Rajamani, *International Climate Change Law* (Oxford University Press, 2017), p. 3.

<sup>86</sup> A. Wang, ‘Symbolic Legitimacy and Chinese Environmental Reform’ (2018) 48(4) *Environmental Law*, pp. 699–760, at 726; According to Pew research, climate change has not been perceived by the Chinese government and the public to be as serious as air pollution, water pollution or energy security. This survey shows that about three-quarters (76%) of people in China regard air pollution as a big problem, of which 35% regard it as a very big problem. Just 18% think climate change is a ‘very serious’ problem – a much lower number than the 54% median level in 40 countries surveyed. Similarly, while 40% of the world populations are very concerned that global warming will harm them personally, just 15% in China share this fear: Pew Research Center, ‘Global Concern about Climate Change, Broad Support for Limiting Emissions’, available at: <http://www.pewglobal.org/2015/11/05/global-concern-about-climate-change-broad-support-for-limiting-emissions>.



environment of a proposed project.<sup>87</sup> Aiming to provide precise information about the environmental resilience of the proposed activity, this provision warrants an assessment of how this activity could be affected by the surrounding environment (such as hydrological, climatic and meteorological conditions, vegetation, and geology). This aspect of EIA is especially imperative when climate change profoundly changes the environmental baseline and threatens the existence and operation of the project.

Furthermore, technical guidance, related climate policies and EIA practices also demonstrate the possibility of and necessity for climate change assessment. China's technical guidance for reviewing project-level environmental impact statements requires that such statements should consider the feasibility and effectiveness of measures taken to conserve energy and reduce GHG emissions.<sup>88</sup> The technical guidance for planning-level EIA also requires an evaluation of the environmental benefits of plan implementation in terms of improving environmental quality, increasing the efficiency of resource utilization and reducing GHG emissions.<sup>89</sup> Both of these guidelines show that the Ministry of Ecology and Environment (MEE), which produced the technical guidance outlined above, recognizes the necessity of assessing the impact of GHG emissions in the EIA procedure. The 13<sup>th</sup> national economic and social development plan requires full consideration of climate change factors in developing urban and rural planning and building projects in order to adapt to climate change.<sup>90</sup> Despite the absence of legal requirements, there is a practice of climate change integration at the planning level in the EIA process. It has been found that planning sectors with clear emissions reduction tasks (such as energy planning) and those more vulnerable to climate change impacts (such as hydraulic engineering planning) have shown a higher degree of integration of climate change factors.<sup>91</sup> They indicate that integrating (both mitigation and adaptation) climate change factors in the EIA regime is not only necessary in practice but also possible in legal procedure.

Air pollution regulation and climate change regulation developed largely in isolation in China<sup>92</sup> until the new LAPPC, as amended in 2015, for the first time integrated GHG reductions within the existing legal framework of air pollution control. The LAPPC requires coordinated control of atmospheric pollutants (such as particles, sulphur dioxide, nitrogen oxide, volatile organic compounds, and ammonia) and GHGs.<sup>93</sup>

<sup>87</sup> EIA Law, 2018, Art. 17.

<sup>88</sup> Ministry of Environmental Protection (MEP), Guideline for Technical Review of Environment Impact Assessment (建设项目环境影响技术评估导则), HJ616-2011 (2011), para 6.3.2.8.

<sup>89</sup> MEP, Technical Guidelines for Strategic Environmental Assessment: General Principles (规划环境影响评价技术导则总纲), HJ 130-2019 (2019), para. 9.2.3.

<sup>90</sup> National People's Congress, 13<sup>th</sup> Five Year Plan of National Economic and Social Development (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), 2016, Ch. 46.

<sup>91</sup> J. Wu & Y. Zhang, 'Integrating Climate Change Factors in China's EIA' (关于中国将气候变化因素融入环境影响评价的探讨) (2011) 33(9) *Environmental Pollution and Prevention*, pp. 91–4; Y. Wu & J. Ren, 'Integrating Climate Change Factors in Planning EIA: Status Quo Investigation and Analysis' (规划环评中纳入气候变化因素的现状调查与分析). Annual Conference of Chinese Society for Environmental Science, 2014.

<sup>92</sup> Y. Yamineva & Z. Liu, 'Cleaning the Air, Protecting the Climate: Policy, Legal and Institutional Nexus to Reduce Black Carbon Emissions in China' (2019) 95 *Environmental Science and Policy*, pp. 1–10, at 8.

<sup>93</sup> LAPPC, 2018, Art. 2.



Synergetic control is expected to produce co-benefits in terms of reducing institutional and management costs, but this law does not clarify how this should occur. What is relatively clear is that the LAPPC indicates that GHGs and air pollutants have a different legal status and GHGs are not defined as air pollutants.<sup>94</sup> Therefore, many scholars conclude that this law could not be used directly to regulate GHG emissions.<sup>95</sup> However, as air pollutants and GHGs in many circumstances share the same emitting sources from fossil-fuel combustion, regulating conventional air pollutants actually contributes to GHG reductions, and vice versa.<sup>96</sup> Statistics also show that 90% of industrial emissions of CO<sub>2</sub> in China come from high-polluting industries of thermal power, steel, and cement, which underscores the possibility of and necessity for co-regulation.<sup>97</sup> On the other hand, there are also trade-offs where reducing a particular pollutant emission through terminal management technology leads to an increase in energy consumption or climate warming.<sup>98</sup> Therefore, in order to produce synergetic effects it is essential to assess how air pollution control efforts and carbon reduction measures interact when making decisions on a proposed project. EIA, as a preventative regulatory tool, is the appropriate mechanism to implement this coordinated control. Institutional reform by way of transferring responsibilities for regulating climate change from the National Development and Reform Commission (NDRC) to the MEE would facilitate the integration of climate change considerations in the EIA process and eliminate institutional barriers.

Equally relevant are the ‘Measures for the Administration of Climate Feasibility Study’ promulgated by the China Meteorological Administration in 2008.<sup>99</sup> The objective of this regulation is to prevent or mitigate the impacts of meteorological disasters or climate change on planning or projects, or conversely the impacts of planning or projects on the local climate. The regulation requires plans and projects that are closely related to climate conditions to be subject to a climate feasibility study, which includes an evaluation of the probability of extreme weather events, the climate suitability of the proposed plan/project, climate risks and potential impacts on the local

<sup>94</sup> W. Gong, ‘Cooperative Control of Air Pollutants and GHGs: Challenges and Responses from the Perspective of Enforcement’ (大气污染物与温室气体协同控制面临的挑战与应对——以法律实施为视角) (2017) 1 *Journal of Southwestern University for Nationalists (Humanities and Social Science Edition)*, pp. 108–13.

<sup>95</sup> Y. Li & Z. Zhang, ‘The Legal Status of CO<sub>2</sub> and Regulatory Choice of Emission Control’ (二氧化碳的法律定位及其排放规制立法路径选择) (2015) 2 *Social Science Research*, pp. 30–4.

<sup>96</sup> Y. Zhao, ‘Climate Change Litigation in China: Empirical Analysis of 41 Air Pollution Public Interest Cases’ (气候变化诉讼在中国的路径探究——基于41个大气污染公益诉讼案件的实证分析) (2019) 6 *The Journal of Shandong University (Philosophy and Social Science)*, pp. 26–35, at 29; A. Gu, F. Teng & X. Feng, ‘Analysis and Evaluation of Greenhouse Gas Synergies of Pollutant Control Policies in Major Sectors’ (主要部门污染物控制政策的温室气体协同效果分析与评价) (2016) 26(2) *Chinese Population, Resources and Environment*, pp. 10–7, at 10.

<sup>97</sup> Y. Chen et al., ‘Policy Suggestions of Responding to Climate Change by Institutional Innovation of EIA’ (通过环评制度创新应对气候变化的对策建议) (2016) 41(2) *Environment and Sustainable Development*, pp. 17–20, at 18.

<sup>98</sup> Gu, Teng & Feng, n. 96 above, p. 15.

<sup>99</sup> China Meteorological Administration, Measures for the Administration of Climate Feasibility Study (气候可行性论证管理办法), No. 18, 2008.

climate.<sup>100</sup> The government authority that is empowered to approve the proposed planning or project must consider the findings of the climate feasibility study, and reject those without such studies. However, because of the high reliance on existing basic data and historical records as the main sources of information for feasibility studies, this regulation focuses mainly on the assessment of climatic variability rather than on climate change.<sup>101</sup> Furthermore, it does not provide a monitoring mechanism or follow-up assessment, which is crucial for coping with climate change impacts.<sup>102</sup> Nevertheless, the measures to a large extent provide a legal basis for integrating mainly adaptation and some mitigation considerations within the decision-making process on planning and projects. This ensures that risks or impacts of climate change will have been considered by the meteorological administration before they are addressed in EIA-related laws.

### *Resolving the legal challenges of regulating climate change in EIA laws*

Integrating climate change within the EIA process entails reviewing and reforming current EIA procedures, including the screening process for selecting projects, the scoping process for identifying relevant impacts, and the decision-making process to assess the project's costs and benefits. In the screening process, for example, the government needs to decide upon the category of climate-related project that should be subject to EIA obligations. Legal challenges may vary depending on the EIA legal framework and respective GHG emissions reduction commitments. In jurisdictions like the US, Australia and New Zealand, where environmental impacts caused by a proposed project need to be 'significant' to trigger the EIA procedure, a crucial challenge to the inclusion of climate change in the EIA process is the need to establish the significance of the GHG emissions of a proposed activity.<sup>103</sup> For instance, in the 2016 US draft guidance for climate change considerations in the EIA, a reference point of 25,000 metric tonnes or more of CO<sub>2</sub> equivalent on an annual basis is recommended as a threshold for quantitative and qualitative analysis of GHG emissions.<sup>104</sup> However, defining the term 'significant' remains mathematically difficult, and it is often influenced by policy and political considerations.<sup>105</sup>

<sup>100</sup> Art. 4 lists 'plans and projects closely related to climate conditions', which include urban and rural planning, regional development planning, major infrastructures, public facilities and large-scale projects, and large-scale projects which develop and utilize climate resources, such as solar energy and wind energy.

<sup>101</sup> Climate variability is defined as the variation in the mean state and other statistics of the climate on all temporal and spatial scales, beyond individual weather events. Climate change is 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods': World Meteorological Organization, Frequently Asked Questions, available at: <http://www.wmo.int/pages/prog/wcp/ccl/faqs.php>.

<sup>102</sup> Q. Gao, 'Mainstreaming Climate Change into the EIA Procedures: A Perspective from China' (2018) 10(3) *International Journal of Climate Change Strategies and Management*, pp. 342–58, at 343.

<sup>103</sup> Mayer, n. 71 above, pp. 293–4; Lin, n. 22 above, p. 591.

<sup>104</sup> J.A. Wentz, 'Draft NEPA Guidance Requires Agencies to Consider both GHG Emissions and the Impacts of Climate Change on Proposed Actions' (2015) 26(4) *Environmental Law in New York*, pp. 57–63, at 57.

<sup>105</sup> Christopher, n. 66 above, p. 566; M. Jones & A. Morrison-Saunders, 'Making Sense of Significance in Environmental Impact Assessment' (2016) 34(1) *Impact Assessment and Project Appraisal*, pp. 87–93, at 87.

China's EIA Law requires all proposed projects that may produce environmental impacts to go through the EIA process, with a classified management approach.<sup>106</sup> According to the MEE classification, projects must prepare different forms of EIA documents based on their level of environmental impacts: significant, modest or mild.<sup>107</sup> The more significant the environmental impacts, the more detailed the EIA documents. Therefore, the challenge for China is in determining how to categorize projects that emit GHGs and projects that are vulnerable to climate change impacts. The MEE is entrusted with formulating and amending this classification,<sup>108</sup> yet the assigned category of each project is heavily influenced not only by scientific input but also by political bargaining and economic implications. A possible solution for the categorization challenge might be to draw upon China's approaches to addressing climate change on other issues. For example, the obligation of reporting and verification of carbon emissions in China rests on key emissions industries such as petrochemicals, chemicals, building materials, steel, non-ferrous metals, paper manufacture, electric power, and aviation enterprises that emit 26,000 tonnes of CO<sub>2</sub> equivalent or above.<sup>109</sup> A feasible suggestion for the purpose of EIA screening could be to categorize those key emissions industries as China's carbon majors and use 26,000 tonnes as a threshold for the climate change assessment requirement.

Another closely related challenge relates to determinations of whether the impact assessment and mitigation measures are sufficient for EIA approval at project level.<sup>110</sup> The EIA Law relies mainly on environmental standards to judge the adequacy of conventional pollution control, but offers no such reference point for GHG emissions. This article proposes a target-based model in which a carbon intensity (or carbon emissions based on gross domestic product) reduction target is used to evaluate the adequacy of climate change considerations. This model could be a promising choice for China because imposing carbon intensity reduction targets on carbon-intensive industries is a relatively mature practice.

### 3.3. *The Prospects of EIA-Based Climate Change Litigation in China*

The great regulatory flexibility to integrate climate change considerations within an EIA regime indicates the potential for a promising future in EIA-based climate change litigation in China. Relying on existing legal frameworks such as the EIA Law and the LAPPC, EIA-based litigation offers the benefit of maintaining the stability of legal

<sup>106</sup> EIA Law, 2018, Art. 16.

<sup>107</sup> The catalogue here refers to the 'Catalogue for the Classified Administration of Environmental Impact Assessments for Construction Projects' (建设项目环境影响评价管理名录), which is formulated by the MEE based on project features, size, output, environmental sensitivity, and other related environmental parameters.

<sup>108</sup> EIA Law, 2018, Art. 16.

<sup>109</sup> MEE, Notice on Completing the Carbon Emission Report and Verification in 2019 and Submitting the List of Key Emission Units in the Power Generation Industry (关于做好2019年度碳排放报告与核查及发电行业重点排放单位名单报送相关工作的通知), MEE Order No. 943, 2019.

<sup>110</sup> For governmental planning in China, EIA is a procedural requirement and does not bind the planning authorities as to the outcome. For projects, developers need to obtain EIA approval from competent environmental agencies before project construction.

systems in terms of adjudicative processes and the delivery of legally enforceable outcomes. There have been cases concerning the regulation of CO<sub>2</sub> emissions through environmental laws, including those involving EIA laws and the LAPP. In *Kaibing v. Zhejiang Environmental Protection Bureau (EPB)*, for example, the Yichang Court was required to address whether a newly added facility, which increased the recycling of wood tar and, thus, reduced CO<sub>2</sub> emissions, was subject to an EIA.<sup>111</sup> In *Yongsheng v. Wafangdian EPB*, one of the disputes between a cement manufacturing company and the local EPB involved the question of whether emissions of CO<sub>2</sub> and nitrogen oxides during peak hours violated the LAPP.<sup>112</sup> Moreover, the emergence of EIA-based climate change litigation is further bolstered by the trend of broadening standing qualifications in administrative litigation, as well as the advantageous role of the procuratorate<sup>113</sup> in supervising environmental authorities by bringing public interest litigation. Lastly, climate change claims could also take advantage of current EIA litigation practice to obtain judicial attention and settlement.

The Administrative Litigation Law (AL Law) and judicial experience show a clear trend in relaxing standing requirements for plaintiffs, which provides easier access for interested parties to bring climate change-related claims. Since the 1980s, grounds for standing in administrative litigation have expanded from ‘direct interest’ to ‘relating to administration’, and then from ‘legal rights and interests’ to ‘with an interest’.<sup>114</sup> For some time courts had relied on either direct contact theory or actual influence theory to judge whether the plaintiff has a stake in administrative action, and therefore standing.<sup>115</sup> To reduce the judicial discretion of lower courts when reviewing standing and to clarify the ‘with an interest’ standard, the SPC adopted the *Schutznormtheorie* (the theory of protective norms) in its judicial interpretation of the AL Law as well as in one of its recent high-profile administrative cases.<sup>116</sup>

In *Liu Guangming v. Zhangjiagang People’s Government*, the SPC delivered a very clear and influential message that ‘one important criterion for judging whether there is an interest in the administrative act is whether administrative organs are required to consider, respect and protect the substantive rights or legal interests of the plaintiff

<sup>111</sup> *Kaibing Artificial Environmental Protection Carbon Plant in Zhijiang City v. Zhijiang EPB* (枝江市开兵人造环保炭厂、枝江市环境保护局环境保护行政管理(环保)二审行政判决书), Final Administrative Judgment No. 74, 2018, Intermediate Court of Yichang, Hubei Province (*Kaibing*).

<sup>112</sup> *Yongsheng Cement Manufacturing Co. Ltd v. Wafangdian EPB and Wafangdian People’s Government* (大连永盛水泥制造有限公司与瓦房店市环境保护局、瓦房店市人民政府环境保护行政管理(环保)一审行政判决书), First Instance Judgment No. 54, 2019, Primary Court of Zhuanghe, Liaoning Province (*Yongsheng*).

<sup>113</sup> The procuratorate is traditionally regarded as a legal supervisory body in China’s judicial system. For an introduction to the procuratorate, see Ministry of Foreign Affairs of the People’s Republic of China, People’s Procuratorates, available at: [https://www.fmprc.gov.cn/mfa\\_eng/ljzg\\_665465/zgjk\\_665467/3579\\_665483/t17849.shtml](https://www.fmprc.gov.cn/mfa_eng/ljzg_665465/zgjk_665467/3579_665483/t17849.shtml).

<sup>114</sup> On standing, the AL Law, Art. 25, provides that ‘a person subject to an administrative act or any other person who is a citizen, a legal person, or any other organization with an interest in the administrative act shall have the right to file a complaint against the administrative act’. J. Zhang, ‘Judgment Criteria of the “Stake” of the Standing of Administrative Litigation’ (行政诉讼原告资格中“利害关系”的判断结构) (2019) 4 *Chinese Legal Science*, pp. 244–64, at 249, 250.

<sup>115</sup> *Ibid.*, p. 256.

<sup>116</sup> *Ibid.*, p. 253.

when making decisions according to related substantive administrative laws'.<sup>117</sup> Although it is contested whether this theory could apply to the protection of procedural rights, it does open up the possibility.<sup>118</sup> In fact, before this high-profile case, the SPC stated in an EIA case that 'if the administrative body is required to solicit or hear the plaintiff's opinions in the administrative procedure according to substantive administrative law, it should be considered that the plaintiff has an interest in the administrative act being sued and therefore standing'.<sup>119</sup> Based on this understanding, what is crucial for standing justification in EIA litigation is to examine whether related laws obligate environmental authorities to seek opinions from the plaintiff.

Article 56 EPL stipulates that the environmental authority approving the EIA document is required to order the project developer to solicit public opinion if it discovers that the public has not been fully consulted over the project.<sup>120</sup> The MEE departmental rule on project-level EIA public participation clarifies that project proponents are required to seek the views of the public located within the geographical scope of the EIA by holding demonstration meetings, hearings, or by any other means before submitting the EIA reports for examination and approval.<sup>121</sup> Therefore, to determine whether the plaintiff is an interested party, the court could review whether the plaintiff is located within the geographical scope identified by the EIA reports. This criterion has been frequently adopted by judges in other cases.<sup>122</sup> Without the need to prove actual influence, citizens located within the geographical scope of a proposed project would find it easier to bring claims for insufficient consideration of climate change impacts, insufficient disclosure of climate change information, or poor public participation.

Furthermore, after the environmental authorities are entrusted with the responsibility of addressing climate change, one of the legal challenges for them is how to coordinate the responsibility of managing environmental issues and climate

<sup>117</sup> *Liu Guangming v. Zhangjiagang People's Government* (刘广明与张家港市人民政府行政复议再审查), Retrial Administrative Case No. 169, Supreme People's Court, 2017.

<sup>118</sup> T. He, 'The Introduction and Problems of the Theory of Protection Norm' (保护规范理论的引入与问题) (2019) 4 *Jiaoda Fxue*, pp. 132–45, at 141.

<sup>119</sup> *Wang Chun et al. v. MEE* (王春等与中华人民共和国环境保护部环境保护行政纠纷再审查), Retrial Administrative Case No. 172, Supreme People's Court, 2016.

<sup>120</sup> EPL, 2014, Art. 56.

<sup>121</sup> EIA Law, 2018, Art. 21; MEE, Measures of Public Participation in the Project Level EIA (环境影响评价公众参与办法), No. 4, 2018, Art 5. According to this regulation, public participation is obligatory only for those preparing EIA reports.

<sup>122</sup> See *Wang Cuixiang et al. v. Shanxi EPB and MEE* (王翠香等诉山西省环境保护厅等复议案), Final Administrative Judgment No. 952, 2017, Higher People's Court of Shanxi Province. Cases collected by the author also confirm the importance of these two points; for example, in *Chenjiatang Group of Villagers in Wujin District Changzhou v. Changzhou EPB* (常州市武进区雪堰镇新康村陈家塘村民小组等诉常州市环境保护局批准案), Final Administrative Judgment, No. 98, 2017, Intermediate Court of Changzhou, Jiangsu Province, the focus of disputes was whether the plaintiffs have standing to bring an action against the environmental authority's EIA approval. The court found that the EIA assessment scope of the project in question should be not less than 3,000 metres away from the source point according to technical guidance. As the plaintiffs were about 4,400 metres away, they did not have a legal interest in the case. The same adjudication and judicial reasoning prevailed in *Zhou Ruimin et al. v. Beijing EPB & Beijing People's Government* (周睿敏等与北京市环境保护局等复议决定上诉案), Final Administrative Judgment No. 866, 2017, Second Intermediate People's Court of Beijing.

change.<sup>123</sup> This coordination requires the environmental authority to assess whether a proposed project under EIA approval is carbon-intensive or climate-vulnerable. The procuratorate has been empowered to bring litigation against government agencies on behalf of the public interest.<sup>124</sup> It is required to step in when an environmental authority violates EIA laws, violates the substantive or procedural obligations of addressing climate change, or is guilty of illegal administrative inaction.<sup>125</sup> Compared with lawsuits brought by individual citizens, the procuratorate has advantages in terms of its financial resources and expertise, as well as political support, which mitigates against the court's reluctance to accept cases that challenge governmental agencies.<sup>126</sup> More importantly, the requirement that administrative agencies rectify their omission or illegal behaviour before litigation commences not only protects the environmental public interest but also improves environmental law enforcement.<sup>127</sup>

Conventional judicial practice in the area of EIA could be used as an avenue to deal with climate change claims. Empirical study shows that two types of EIA litigation account for the majority of cases.<sup>128</sup> The first type is litigation brought by project owners to challenge EIA enforcement by environmental authorities as being too strict or unlawful, especially where administrative penalties are concerned. The second type is litigation brought by local residents who are affected by the environmental impacts of projects and seek to annul decisions of environmental authorities on the basis of substantive or procedural violations of EIA law. Prominent examples of such litigation assert fraudulent public consultation, misleading or insufficient information disclosure, and lack of hearing.<sup>129</sup> Litigation against EIA approvals has provided an important channel for those affected to correct the unlawful decisions of environmental authorities.

In essence, the two categories of litigation represent two conflicting claims or interests embedded in the EIA regime: one trying to weaken EIA regulation, the other aiming to strengthen it. As project-related instances of climate change litigation, they are either brought by project developers to challenge environmental authorities on the ground of overly strict enforcement of mitigation or adaptation regulations, or they are brought by affected members of the public, or by the procuratorate, against environmental authorities for not adequately taking climate change risks into account in the decision-

<sup>123</sup> The MEE has performed this duty through evaluating the progress of addressing climate change (GHG reduction or carbon intensity reduction) in its annual *Bulletin on the State of Environmental Quality* since 2017. Yet, this Bulletin does not analyze how the dual responsibility of the MEE is coordinated.

<sup>124</sup> AL Law, 2017, Art. 25. According to the 2017 AL Law, the procuratorate could bring litigation on behalf of the public interest against an administrative authority if it fails to perform its supervisory duty in the protection of the ecological environment and natural resources.

<sup>125</sup> Tan, n. 25 above, p. 168.

<sup>126</sup> T. Zhai & Y. Chang, 'Standing of Environmental Public-Interest Litigants in China: Evolution, Obstacles and Solutions' (2018) 30(3) *Journal of Environmental Law*, pp. 369–97, at 379–80.

<sup>127</sup> *Ibid.*, p. 383.

<sup>128</sup> The author has collected about 180 cases released by an online database, and summed up these two types of litigation.

<sup>129</sup> Z. Jin & L. Liu, 'Judicial Review of Public Participation in the EIA Procedure' (环境影响评价公众参与的司法审查机制完善) (2017) 2 *Academic Journal of Zhongzhou*, pp. 57–60, at 57–8.



making process.<sup>130</sup> Hence, as with traditional EIA litigation, the categories include, respectively, anti-regulatory litigation and pro-regulatory litigation. It is therefore very plausible that climate change claims will be brought and litigated in the same way as traditional EIA claims.

#### 4. TORT-BASED CLIMATE LITIGATION: IDENTIFYING LEGAL BARRIERS TO APPLYING TORT-BASED RULES TO CLIMATE CHANGE IN CHINA

The future of climate change litigation will be determined, at least partly, by how many legal barriers can be overcome without undermining existing legal orders and their coherence. This section argues that tort-based climate change litigation – including both public interest litigation and private litigation brought against GHG emitters – faces insurmountable litigation difficulties and political barriers in China. Thus, while some Chinese scholars remain hopeful that this type of litigation is the future of climate litigation in China,<sup>131</sup> this article calls for careful consideration of the legal difficulties involved.

Traditional rules on tort are developed to protect civil rights and interests, imposed on identified tortfeasors to impose liability, and implemented by the courts in individual cases. These rules encounter significant challenges when facing an issue as large-scale and complex as climate change, which still has many remaining scientific uncertainties in terms of its timeline and the manifestation of specific climate impacts.<sup>132</sup> Climate change is a collective action problem, diffuse and disparate in origin and lagging in impact. It has effects on an individual, local, state, national, and international level, which renders all of us and none of us responsible.<sup>133</sup> The cumulative nature of climate change also means that identifying defendants and measuring the proportion of damage caused by the emissions of a particular emitter is difficult. As a consequence, while the landscape of tort-based climate litigation is still evolving and there are some positive signs,<sup>134</sup> climate change litigation to impose legal liability or to seek compensation has so far encountered significant obstruction around the globe.<sup>135</sup> For example, tort-based climate change claims for liability and compensation for harm in the US have been largely unsuccessful, as courts are very reluctant to attribute particular harm to a particular emitter.<sup>136</sup> Australia, the country with the second

<sup>130</sup> This is very similar to the US experience where ‘[the] majority of them are claims brought by NGOs to challenge agency permits and agency environmental impact assessments to ensure that GHG emissions and climate change impacts are routinely taken into account and adequately evaluated’: Markell & Ruhl, n. 5 above, p. 24.

<sup>131</sup> Zhao, Lyu & Wang, n. 13 above, p. 349.

<sup>132</sup> Editorial, ‘Scientific Uncertainty’ (2019) 9 *Nature Climate Change*, p. 797.

<sup>133</sup> D.A. Kysar, ‘What Climate Change Can Do about Tort Law?’ (2011) 41(1) *Environmental Law*, pp. 1–71, at 4.

<sup>134</sup> G. Ganguly, J. Setzer & V. Heyvaert, ‘If at First You Don’t Succeed: Suing Corporations for Climate Change’ (2018) 38(4) *Oxford Journal of Legal Studies*, pp. 841–68.

<sup>135</sup> Lin, n. 35 above, p. 38.

<sup>136</sup> L. Butti, ‘The Tortuous Road to Liability: A Critical Survey on Climate Change Litigation in Europe and North America’ (2011) 11(2) *Sustainable Development Law & Policy*, pp. 32–6, at 33.



highest number of climate change cases, has had the same experience with the result that prospects of success in tort actions are remote.<sup>137</sup> Two extremely challenging barriers for tort-based actions on climate change are standing and causation.<sup>138</sup> The following paragraphs explore whether the Chinese legal system facilitates tort claims.

The standing requirement is the key to identifying who is allowed to bring a claim before a court. Standing rules vary among different jurisdictions and different legal areas, depending on the extent to which legislators cede dispute-resolution responsibility to the judiciary. In China, standing is a significant issue for tort litigation because plaintiffs need to demonstrate direct interest in the lawsuits they file and satisfy the burden of proof for their claims.<sup>139</sup> In judicial practice, direct interest is present if the plaintiff's personal rights, property rights or other lawful rights and interests are infringed or affected by the person being sued.<sup>140</sup> This condition could be a meaningful legal hurdle for plaintiffs in climate change litigation in that they must demonstrate that their private rights have been directly affected by a particular defendant's GHG emissions.

As for public interest litigation, the 2014 EPL entrusts environmental NGOs to bring public interest litigation against 'acts polluting the environment or causing ecological damage in violation of public interest' without the requirement to prove standing.<sup>141</sup> Based on this relaxed standing threshold, genuine climate change litigation arguably could achieve a breakthrough via this type of litigation.<sup>142</sup> There is also the argument that the term 'ecological damage' could be reinterpreted to cover climate change, thereby providing a legal basis for NGOs to bring climate change litigation.<sup>143</sup> This article agrees that the empowerment of NGOs and the reinterpretation of ecological damage may provide an opportunity to bring public interest litigation in relation to GHG-emitting activities or activities that involve climate risks. However, as will be explained, the success of these types of claim depends on whether tort rules on environmental pollution could be applied to climate change. Furthermore, environmental NGOs have encountered various hurdles in proving their standing when bringing public interest litigation;<sup>144</sup> it could be even more difficult for them to prove standing when bringing climate change claims.

<sup>137</sup> N. Durrant, 'Tortious Liability for Greenhouse Gas Emissions: Climate Change, Causation and Public Policy Considerations' (2007) 7(2) *Law and Justice Journal*, pp. 403–24, at 404.

<sup>138</sup> Hsu, n. 63 above, p. 704.

<sup>139</sup> Civil Procedure Law, 2017, Art. 119; Interpretation of the Supreme People's Court on the Application of the Civil Procedure Law (最高人民法院关于适用《中华人民共和国民事诉讼法》的解释), 2014, Art. 91.

<sup>140</sup> D. Tang, *Legislation and Application of Civil Procedure Law* (民事诉讼法立法与适用) (China Legal Publishing House, 2002) p. 185; Y. Cao, 'The Construction of Judgment Standard of Interested Party in Civil Litigation' (民事诉讼正当当事人判断标准的建构——兼谈起诉条件的“双重高阶化”) (2017) 5 *Northern Legal Science*, pp. 87–96.

<sup>141</sup> EPL, 2014, Art. 58.

<sup>142</sup> Zhao, Lyu & Wang, n. 13 above, p. 369; Zhang, n. 25 above.

<sup>143</sup> J. Li, 'Climate Change Litigation: A Promising Pathway to Climate Justice in China?' (2019) 37(2) *Virginia Environmental Law Journal*, pp. 132–70, at 146.

<sup>144</sup> D. Boer & D. Whitehead, 'Opinion: The Future of Public Interest Litigation in China', *China Dialogue*, 11 Aug. 2016, available at: <https://www.chinadialogue.net/article/show/single/en/9356-Opinion-The-future-of-public-interest-litigation-in-China>.

Secondly, establishing causation between carbon emissions and a particular alleged instance of climate damage represents an intractable barrier for claimants because of the multitude and highly dispersed nature of individual emitters responsible for the emission of GHGs.<sup>145</sup> As the court in the *Kivalina* case concluded, there was ‘no realistic possibility of tracing any particular alleged effect of global warming to any particular emissions by any specific person, entity, [or] group at any particular point in time’.<sup>146</sup> China’s Tort Law and related judicial interpretation have developed favourable rules on causation for the plaintiff in environmental tort litigation in order to provide better access to courts for the victim-plaintiff.<sup>147</sup> For example, the Tort Law adopts strict liability so that the plaintiff does not need to prove that the defendant is at fault in causing damage. Most importantly, judicial interpretation on environmental tort also adopts the principle of presumed causation, where the burden of proof on causation shifts to the polluter-defendant after the plaintiff has shown that there is a connection between the discharged pollutants and the damage suffered, and the polluter-defendant bears the responsibility of producing substantial evidence in order to rebut causation.<sup>148</sup> However, these exceptional provisions are strictly pollution-based and rely heavily on environmental quality standards to determine causation.<sup>149</sup> Therefore, they could not simply be applied to climate change litigation, especially when CO<sub>2</sub> is not defined as an air pollutant, and when no environmental standard exists against which to judge whether climate change goes beyond a certain threshold.

Tort Law is enacted by the legislature and involves complicated trade-offs of interests.<sup>150</sup> It is stringently code-based and therefore could not extend to climate change liability automatically in the absence of explicit provision.<sup>151</sup> Furthermore, judicial practice in environmental tort shows that while there is judicial divergence in the application of the rules governing burden of proof, the majority of judges require plaintiffs to prove causation in spite of the clear legal rules on the reversal of the burden of proof.<sup>152</sup> This serious departure from legislation and related judicial interpretation, together with strong judicial deference to science-based evaluation reports in proving causation,<sup>153</sup>

<sup>145</sup> P. Cashman & R. Abbs, ‘Liability in Tort for Damage Arising from Human-Induced Climate Change’, in R. Lyster (ed.), *In the Wilds of Climate Law* (Australian Academic Press, 2010), pp. 235–72, at 235.

<sup>146</sup> *Kivalina v. ExxonMobil Corporation et al.*, 696 F.3d 849, 2012 WL 4215921 (9th Cir 2012).

<sup>147</sup> Tort Law, 2009, Ch. 8.

<sup>148</sup> Interpretation of the Supreme People’s Court of Several Issues on the Application of Law in the Trial of Disputes over Liability for Environmental Torts (最高人民法院于审理环境侵权责任纠纷案件适用法律若干问题的解释), 2015, Arts 6 and 7.

<sup>149</sup> For polluters to bear tort liability for environmental pollution, they need to prove that the environment (air, water or land) is polluted by the violation of certain environmental quality standards: W. Chen, ‘The Application of Environmental Quality Standard to Tort Law’ (环境质量标准的侵权法适用研究) (2017) 1 *China Legal Science*, pp. 209–29, at 209.

<sup>150</sup> X. Zhang, ‘The Balancing of the Interest in the Legislation of the Tort Liability Law’ (侵权责任立法的利益衡量) (2009) 4 *China Legal Science*, pp. 176–90, at 176.

<sup>151</sup> H. Deng, ‘China’, in R. Lord et al. (eds), *Climate Change Liability: Transnational Law and Practice* (Cambridge University Press, 2012), pp. 112–38, at 112.

<sup>152</sup> F. Yang, T. Zhang & H. Zhang, ‘Adjudicating Environmental Tort Cases in China: Burden of Proof, Causation, and Insights from 513 Court Decisions’ (2018) 21(2) *Asia Pacific Journal of Environmental Law*, pp. 171–89, at 180.

<sup>153</sup> *Ibid.*, pp. 180, 183.

cast serious doubt on the applicability of tort-based rules to climate change litigation. Moreover, if the rule of presumed causation and burden of proof were to apply to climate change claims, it would hardly be possible for alleged emitters to rebut causation by proving that their discharged GHGs could not possibly have caused the damage, which would render any targeted emitter accountable. This would result in a flood of claims, and the judiciary definitely does not want to open this Pandora's box.

In addition, in deciding whether to apply tort rules to climate change, Chinese courts will inevitably consider public policy concerns, including but not limited to the government's energy policy, economic concerns, the fairness of imposing liability, and the social burden. For example, most large energy producers and GHG emitters in China are state-owned enterprises (SOEs) – key actors in implementing the government's energy policy and GHG reduction goals.<sup>154</sup> SOEs and central and local governments work closely together such that SOEs rely on government for policy preference and government relies on SOEs to implement energy policy and improve international market competitiveness.<sup>155</sup> In many areas, centrally owned SOEs are a significant factor in making government policies, standards and decisions on climate change.<sup>156</sup> Therefore, it is easy to foresee that suing SOEs and holding them accountable for climate change harm would face challenging political barriers in China.

Admittedly, the difficulty in holding private entities accountable for their GHG emissions could be reduced as a result of developments in climate science. As argued, there have been great scientific advances in quantifying businesses' historical emissions and attribution science, which 'generates new opportunities for judges to rethink the interpretation of existing legal and evidentiary thresholds for claimants to meet the burden of proof and apply them in a way that will enhance the accountability of private greenhouse gas (GHG) emitters'.<sup>157</sup> Climate change cases in other countries also show that, in some instances, courts have actually responded to well-developed science on the impacts of climate change.<sup>158</sup> However, the emerging scientific development on 'attribution science' focuses primarily on the relationship between human activity on climate change and specific extreme weather events.<sup>159</sup> It does not respond directly to the key question of *who* caused those GHGs to be emitted into the atmosphere, *who* is the proximate cause of particular adverse climate change impacts, and therefore *who* should assume liability.<sup>160</sup> Plaintiffs in tort actions therefore will still find it difficult to trace alleged climate-related injuries or property damage to the actions of a

<sup>154</sup> B. Mayer & M. Rajavouri, 'State Ownership and Climate Change Mitigation: Overcoming the Carbon Curse?' (2017) 11(3) *Climate and Carbon Law Review*, pp. 223–33, at 231.

<sup>155</sup> L. Williams, *China's Climate Change Policies: Actors and Drivers* (Lowy Institute Analyses, 2014), p. 13.

<sup>156</sup> *Ibid.*

<sup>157</sup> Ganguly, Setzer & Heyvaert, n. 134 above, p. 842.

<sup>158</sup> S. McCormick et al., 'Science in Litigation, the Third Branch of U.S. Climate Policy' (2018) 357(6355) *Science*, pp. 979–80.

<sup>159</sup> S. Marjanac & L. Patton, 'Extreme Weather Event Attribution Science and Climate Change Litigation: An Essential Step in the Causal Chain?' (2018) 36(3) *Journal of Energy & Natural Resources Law*, pp. 265–98, at 278.

<sup>160</sup> *Ibid.*

particular defendant based on the currently available science.<sup>161</sup> This may change as climate science continues to advance, but the likelihood that this shift will occur in the near future is low.<sup>162</sup> A further challenge of tort-based litigation relying heavily on climate science is that it exposes courts to the conflict between science and causation, an issue that goes beyond the scope of judicial authority and competence.<sup>163</sup>

## 5. CONCLUSION

Exploring the prospect of climate change litigation in China entails examining which part of environmental law provides greater potential, openness, and flexibility for the resolution of climate change disputes. The burgeoning developments in environmental tort law in China, and the numerous tort cases, do not necessarily signal a green light for climate change tort-based litigation. Current tort rules on environmental pollution are clearly designed for damage caused by traditional pollutants and could not apply directly to private claims relating to climate change. Even if tortious rules extend to climate change claims, the complexity and uncertainty inherent in climate change suggests that the challenge of proving standing and causation remains daunting. This article proposes that EIA, a well-established decision-making tool, could constitute the main pathway or approach for minimizing GHG emissions and adapting to climate risks at the plan or project level. Regulating climate change through EIA by interpreting or revising existing laws has been a global trend, and is reflected in national practice. Although China's EIA legal framework does not clarify that climate change is a legitimate environmental issue that should be addressed in the EIA process, it actually provides observable flexibility and possibilities for integrating both mitigation and adaptation. As a result, compared with tort-based litigation, EIA-based climate change lawsuits may encounter relatively fewer legal barriers, require less radical legal or institutional reform, and have greater potential to maintain existing legal orders.

Climate change litigation does not only take place retrospectively by reference to existing laws and regulations, but also could be constructed prospectively. The regulation-litigation interaction indicates that its profile and development could be framed or shaped in a certain way. Court rulings and judicial reasoning through the interpretation or application of existing laws will largely determine the flow of climate change lawsuits and map out subsequent regulatory pathways for addressing climate change. Compared with litigation against individual carbon emitters, this article finds that litigation against government authorities to ensure that climate change factors are adequately considered and evaluated in their EIA decisions could stimulate more proactive action by improving the decision-making procedures of both carbon emitters and government authorities. The emergence of a wave of EIA-based climate change litigation may also induce the MEE to enact stringent regulations to address climate change.

<sup>161</sup> McCormick et al., n. 158 above, p. 980.

<sup>162</sup> Ibid.

<sup>163</sup> L. Bergkamp & J.C. Hanekamp, 'Climate Change Litigation against States: The Perils of Court-Made Climate Policies' (2015) 24(5) *European Energy and Environmental Law Review*, pp. 102–14, at 102.

Despite the importance of climate change litigation as part of climate governance, its inherent constraints in addressing climate change need to be recognized. As argued by Peel, ‘the ad hoc nature of court proceedings, the expense involved in bringing them, and the uncertainty as to their results means that, in the long-term, litigation alone is unlikely to be an optimal approach for bringing about effective action to address climate change’.<sup>164</sup> Other criticisms include the limited capacity of the judiciary in adjudicating complex scientific issues embedded in climate cases, and the peril of issuing piecemeal or contradictory rulings.<sup>165</sup> These concerns also apply to China, especially when there is still much to do in improving climate change legislation. In the Chinese context, defects of the EIA regime also limit the regulatory influence of EIA-based climate change litigation. For instance, EIA at the planning level is exempted from judicial review, which indicates that the regulatory effects of EIA-based climate change litigation do not extend to government plans. Nonetheless, climate change litigation could serve as an instrument to enforce and reform existing climate and environmental regulation, or to debate and form consensus about the kind of climate legislation that is needed. Studies of climate change litigation will enrich our understanding of legal disputes engendered by climate change and the capacity of Chinese environmental laws to resolve these disputes, thereby contributing to the development of Chinese climate governance and offering a valuable comparator for climate litigation elsewhere.

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<sup>164</sup> J. Peel, ‘The Role of Climate Change Litigation in Australia’s Response to Global Warming’ (2007) 24(2) *Environmental and Planning Law Journal*, pp. 90–105, at 103.

<sup>165</sup> Peel & Osofsky, n. 6 above, p. 34.