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Nicholas A. Robinson

Elisabeth Haub School of Law at Pace University

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***The ECO Forum Global Guiyang 2023,
8 to 12 July 2013
Guiyang City, Guizhou Province, China***

**Fostering Resilience Within Ecological Civilization:
Contributions of Environmental Law**

Nicholas A. Robinson

Gilbert and Sarah Kerlin Distinguished Professor of Environmental Law *Emeritus*

Elisabeth Haub School of Law at Pace University, New York

And

Executive Governor, International Council of Environmental Law, Madrid

It is an honor to speak to you at the ECO Forum Global Guiyang 2023. I wish I could be with you in person, but am happy that technology enables me to share these thoughts about the roles of the rule of environmental law for serving the objectives of Ecological Civilization. I thank the organizers of this famous conference, and my colleagues at the Research Institute for Environmental Law of Wuhan University, for the invitation to speak to you today. REIL is among the world's first environmental Law institutes and a world leader. It is a privilege to work with REIL.

Ecological civilization offers guidance to restore and sustain the shared health and beauty between people and nature. Finding the practical means to attain Ecological Civilization will not be easy. The traditions that have prevailed since the industrial revolution, extended into the era of computers and cybernetics, perpetuate patterns of pollution and losses of biological diversity that afflict all nations. To end these problems, every sector of society and government has an opportunity to design new, practical ways to attain Ecological Civilization.¹ This paper poses questions for legal scholars and researchers: what particular contributions can environmental law provide to attain Ecological Civilization?

My presentation will examine water, to illustrate the questions that Ecological Civilization presents. I shall address five points: (1) Often proposals for attaining Ecological Civilization raise issues relevant to environmental law, but do not examine the roles that environmental law can serve; (2) environmental law is essential to resolving unsustainable water management issues; (3) scientific studies indicate that trends in global environmental degradation limit the time available for implementing reforms to attain Ecological Civilization;

¹ The holistic approach of Ecological Civilization, which China has adopted, offers guidance that can be employed widely. It includes and goes beyond principles that are congruent with other environmental normative frameworks, such as the Earth Charter, <https://earthcharter.org/library/earth-charter-in-action-chinese/> , or the UN World Charter for Nature, UNGA Res. 37/7 at <http://www.un-documents.net/wcn.htm> .

(4) environmental legal systems for environmental impact assessment (EIA) can accelerate efforts to attain Ecological Civilization; and (5) For Ecological Civilization to ensure a firm foundation for the future, its norms should have priority.

1. Environmental Law - Is it forgotten?

In their thorough study, “CLEAR WATERS and LUSH MOUNTAINS: The Value of Water in the Construction of China’s Ecological Civilization,”² the World Bank and the Development Research Center of the State Council of the People’s Republic of China evaluate how doctrines of Ecological Civilization can be applied to guide realization of a holistic and integrated stewardship of water. In his forward to this study, Long Guoqiang, the Council’s Vice Minister, emphasized that: “President Xi Jinping re-affirmed the importance of water in 16 words that emphasize a ‘priority on water-saving, spatial equilibrium, systematic governance, and the combined efforts of government and the market.’ China has carried out a series of important institutional reforms, such as strengthening market mechanisms (e.g., water trading and pollution permit trading) and economic instruments (e.g., water prices and taxes) as the basis for effective utilization and conservation of water resources. However, many of the reforms still need to be further deepened. It is necessary to fully understand the multiple values of water, evaluate those values with appropriate and effective methods, and strengthen the development of innovative policies, systems, and mechanisms to effectively manage our precious water resources.”³

The study notes juridical issues which arise in the quest to move beyond utilitarian management of water, in order to attain the stewardship of water under ecological civilization. For example, the Yangtze River Basin has different planning and water use priorities between upstream and downstream governmental authorities. There is a need to enhance capacity at the level of the entire river basin in order to support the complex negotiations across different provinces.⁴ Amidst increasing demand for water volume, issues of biodiversity and cultural values of water will need a place at the negotiating table.⁵

² World Bank and Development Research Center. 2022. Clear Waters and Lush Mountains: The Value of Water in the Construction of China’s Ecological Civilization - A Synthesis Report. <http://hdl.handle.net/10986/38374>. Accessed at <https://openknowledge.worldbank.org/server/api/core/bitstreams/ef8fc067-3600-5d35-b0d1-29f883ff2529/content>

³ Id., Forward.

⁴ Id., p. 110.

⁵ The World Bank has noted that: “For China to progress toward its vision for an ecological civilization, socio-cultural and ecological values will need to play an increasingly prominent role in water policy. The tools presented in this report — techniques and recommendations for identifying, evaluating, and realizing these values— are the practical means toward this vision. For China to progress toward its vision for an ecological civilization, socio-cultural and ecological values will need to play an increasingly prominent role in water policy. The tools presented in this report — techniques and recommendations for identifying, evaluating, and realizing these values— are the practical means toward this vision.” Marcus J. Wishart, David Kaczan, and Xiawei Liao, “Valuing Water in the Construction of China’s Ecological Civilization,” World Bank Blog (17 March 2023), at <https://blogs.worldbank.org/eastasiapacific/valuing-water-construction-chinas-ecological->

The study does not go on to examine the role of the rule of law in Ecological Civilization. As a consequence, it and similar studies offer a challenge to scholars of environmental law and natural resources law, as well as theorists of Ecological Civilization. *Such studies do not explain how China's environmental laws can and should implement these studies' diverse recommendations.* Environmental law, with Chinese characteristics, will be essential to attaining Ecological Civilization across all sectors because valuing of water from the perspective of an Ecological Civilization is a part of each and every governmental, social, economic or ecological decision.

The conceptual benefits of grounding decision-making in Ecological Civilization are widely acknowledged.⁶ Much thought is being applied to the means to undertake the reforms necessary for ecological civilization to function as the norm, not the exception. For example, some innovation in legal, regulatory and administrative systems will be needed, including providing incentives to change behavior that is inconsistent with the norms of ecological civilization.⁷ Here is where environmental law has much to provide.

2. Seeking Contributions from Environmental Law

The core aim of Environmental Law is to harmonize the laws of people with the laws of nature. Globally, this means establishing a set of relationships between governments and

[civilization#:~:text=The%20report%20provides%20seven%20policy%20recommendations%20for%20value-sensitive,and%20the%20decoupling%20of%20growth%20and%20environmental%20impacts.](#)

⁶ See, e.g., the essay by Asit K. Biswas, distinguished visiting professor at the University of Glasgow and chairman, Water Management International Pte Ltd., Singapore, and by Cecilia Tortajada, senior research fellow at Lee Kuan Yew School of Public Policy, National University of Singapore, entitled "Building an ecological civilization," *China Daily* (Updated: 2019-10-29 07:22) at <https://global.chinadaily.com.cn/a/201910/29/WS5db7784ba310cf3e355740de.html>.

⁷ Natarajan Ishwaran, Tianhua Hong, Jijun Yi, "Building an Ecological Civilization in China: Towards a Practice Based Learning Approach," *International Journal of Earth Sciences and Engineering* 5(6):349-362 (June 2015), DOI:[10.17265/2159-581X/2015.06.003](#), accessed at https://www.researchgate.net/publication/288994056_Building_an_Ecological_Civilization_in_China_Towards_a_Practice_Based_Learning_Approach. These authors observe that: "The method of production in ecological civilization is not a linear model of natural resources going through the production process of becoming products and wastes but pursues the efficiency of material output on the premise of ecological rationalism rather than the maximization of output. This approach requires forsaking inefficient, extensive, predatory and destructive methods of production and embracing the most resource-efficient methods of production at a minimum cost to the environment and a circular production model in which raw materials are processed into products which, after use, will be recycled back into raw materials. Supplies of essential materials are limited but human desires are infinite. ... Instead of calling for a frugal life and returning to an agrarian civilization, ecological civilization requires that the desire for unnecessary material possessions and consumption be restrained and instead be focused on the basis of securing basic material needs. ... Given that the demand for these is determined by a way of life is also reflected in the methods of production, ecologically-civilized ways of life and consumption are a reflection of the ethical values of ecological civilization. ... The contemporary concept of ecological civilization represents unity between humans and nature on the basis of applying modern science and technology and an advanced understanding of nature."

the natural systems of the Earth's biosphere.⁸ Essential to life on Earth everywhere is the hydrologic cycle, which allocates water across oceans and continents. Currently, nations pollute the water vapor with gaseous emissions, and create acid rain and acid snow, which fall often far from their source. Nations have barely begun to integrate their national air pollution prevention laws with the transboundary distribution of contaminated water vapor.⁹ Similarly, there is a UN Convention on the Law of the Non-Navigational Uses of International Water Courses,¹⁰ but few nations have progressed to implement its norms to prevent contamination of rivers and their discharge into the oceans.¹¹ In other respects also, the Biosphere's hydrologic cycle is not sufficiently taken into account in national laws.

Water, as the scholar Zhou Di has observed, "is the essence of life." She notes that "Water plays a key role in food security, energy, production, ecosystem development, economic growth, social stability, and poverty reduction."¹² In 2015, all UN Member States agreed that human dependency on water is central to UN Sustainable Development Goal 6: "Ensure availability and sustainable management of water and sanitation for all."¹³ In 2017, during the 8th World Water Forum in Brasilia, ten judicial principles for water governance were agreed.¹⁴ This year, all nations reaffirmed the central role of water, as "humanity's most

⁸ See Lal Kurukurusariya and Nicholas A. Robinson, UNEP Training Manual on International Environmental Law (2006), available at <https://digitalcommons.pace.edu/lawfaculty/791/>.

⁹ See the Geneva Convention on Long-Range Transboundary Air Pollution (1979), in force since 1983. See <https://www.genevaenvironmentnetwork.org/environment-geneva/organizations/unece-convention-on-long-range-transboundary-air-pollution/>.

¹⁰ See https://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf.

¹¹ All nations agree that they have a duty to protect the marine environment, Article 92, UN Convention on the Law of the Sea, but they have yet to implement measures necessary to observe this duty.

¹² Zhou Di, "Sustainable Management, Water and Sanitation – A Long and Winding Road Ahead," Chapter 9, pp.137-152, in Narinder Kakar, Vesselin Popovski and Nicholas A. Robinson (Eds.), Fulfilling the Sustainable Development Goals: On A Quest for a Sustainable World (Routledge, 2022) [available at <https://www.routledge.com/Fulfilling-the-Sustainable-Development-Goals-On-a-Quest-for-a-Sustainable/Kakar-Popovski-Robinson/p/book/9780367700270>].

¹³ <https://sdgs.un.org/goals/goal6>

¹⁴ See <https://www.iucn.org/our-union/commissions/world-commission-environmental-law/our-work/history/foundational-documents-0>. The ten principles of the Brasília Declaration of Judges on Water Justice, approved on 21 March 2018 by the Conference of Judges and Prosecutors on Water Justice during the 8th World Water Forum in Brazil, are as follows: *Principle 1 – Water as a Public Interest Good*

Principle 2 – Water Justice, Land Use, and the Ecological Function of Property

Principle 3 – Water Justice and Indigenous and Tribal Peoples and Mountain and Other Peoples in Watersheds

Principle 4 – Water Justice and Prevention

Principle 5 – Water Justice and Precaution

Principle 6 – In Dubio Pro Aqua

Principle 7 – Polluter Pays, User Pays and Internalization of External Environmental Costs

Principle 8 – Water Justice and Good Water Governance

Principle 9 – Water Justice and Environmental Integration

Principle 10 – Procedural Water Justice

precious common global good”¹⁵ at the United Nations Water Conference held in March of 2023.¹⁶ This global conference made clear the remarkable agreement by all nations on the need to act urgently to address water issues. Virtually all nations acknowledged that they do not need new treaties and already had the legal tools to implement SDG 6, and pledged their political will to do so.¹⁷

Ecological Civilization offers the framework through which these legal principles and procedures can be elaborated with Chinese characteristics and applied to ensure effective stewardship of water. The environmental rule of law for water does not need to be invented. It already exists. It just needs to be understood and observed as a top priority.

Within each nation, moving beyond water management to water stewardship is an urgent mission. Climate change has altered the weather patterns affecting the hydrologic cycle. Heavier precipitation of water, intensive floods in some places and deep droughts elsewhere, all with consequences for human settlements, agriculture, biodiversity, and security.

As Zhou Di observes, the norms of Ecological Civilization will serve important roles as China develops its new systems for water stewardship: “Water resource management is one of the main battlefields in moving toward ‘ecological civilization’ in China, as well as in fulfilling China’s commitments to implementing the 2030 SDGs.”¹⁸ She provides a case study for China’s endeavors, highlighting the steps needed to establish effective “Integrated Water Resources Management” in places of the fragmented systems the currently exist in most nations. Her focus is the administrative and legal integration of competencies, both horizontal and vertical, for maintaining water quality in Lake Taihu, in Jiangsu Province. Her study compares accountability systems for both Jiangsu and Hubei provinces, and observes that weaknesses in legal accountability needed to be addressed.

The empirical studies that Zhou Di draws upon are the sort of careful analyses that should be cited in all instances of study for identifying ways to attain Ecological Civilization. The World Bank places a priority on its economic incentives, and too often ignores the essential role of legal systems to provide for (a) designing, (b) governing the use of such incentives, and (c) exercising accountability provisions to ensure that ecological civilization norms are advanced. In this respect, In China it would be of interest to assess accountability for wise water stewardship through the application of the “Measures for the Accountability of Party and Government Leaders for Damage to the Ecological Environment (2015, for trial implementation), issued jointly by the Central Committee of the Chinese Communist Party and the State Council.

¹⁵ See “Roundup: UN 2023 Water Conference closes with bold action on new agenda,” Xinhua (25 March 2023), at http://www.china.org.cn/world/Off_the_Wire/2023-03/25/content_85190628.htm

¹⁶ See, e.g. Dawn McGregor, “UN 2023 Water Conference: Three Takeaways,” at <https://www.chinawaterrisk.org/opinions/un-2023-water-conference-3-key-takeaways>.

¹⁷ I was privileged to attend the UN 2023 Water Conference at UN headquarters in New York, as a delegate from the UN-mandated University of Peace, <https://www.upeace.org/>.

¹⁸ *Op. cit.*, *supra* note 10, p. 137.

Accountability for a resource such as water is essential for effective governance. When mismanagement of water happens, or a flood or drought afflicts a region, or an extreme pollution event happens, the ecological harm is obvious to everyone. It is seen by all, and requires remedial action. Is China's revised Environmental Protection Act and Water Pollution Prevention Act adequate to the challenge? How effective has China's innovations in authorizing the Procuratorate and non-governmental organizations, or others, to bring violations of environmental laws to the courts? To change long-established social patterns from neglecting nature to advancing ecological civilization, these questions matter greatly. As Zhou Di observes, "assessment constitute the basis for accountability."¹⁹

This discussion illustrates, through the example of water, the many research issues for scholars of Ecological Civilization and the roles for ecological law. As the hydrologic cycle changes, with the abrupt disruptions of droughts and floods, a basic question is how much time remains for the transition to Ecological Civilization to be realized? When first advanced, Ecological Civilization was deemed to be a future-oriented guiding normative framework, assuming there was ample time to make the gradual adjustments needed. However, this future-oriented time-line for attaining ecological civilization may need to be advanced in order to attain a balance and harmony with the many new changes that humans around the world are inducing in the Earth's Biosphere.

3. *Is There Enough Time to "Make Peace with Nature"?*

The United Nations Environment Programme's Global Environmental Outlook, GEO-7, was approved for completion by governments on 2 March 2023, and will be completed in 2025 for release in 2026.²⁰ In the meantime, we can anticipate what it will report. Trends in environmental degradation are becoming worse since UNEP's Geo-6 Report,²¹ as UNEP's synthesis report "Making Peace with Nature"²² demonstrate. It is expected that Geo-7 will document the deficit in attaining SDG 6 and the other SDGs. The scientific journal *Nature* has warned that nations are failing to keep on target to attain the UN SDGs by 2030.²³ The forty scientists of the Earth Commission have concluded nations now impact the Biosphere sufficiently to have breached 7 of the 8 planetary security boundaries for sustaining life on Earth as we know it.²⁴ The reports of the UN Intergovernmental Panel on Climate Change are equally troubling in their findings.²⁵

¹⁹ *Id.*, p. 150.

²⁰ See UNEP GEO-7 timetable, at https://wedocs.unep.org/bitstream/handle/20.500.11822/40038/GEO-7%20timeline_final.pdf?sequence=3&isAllowed=y

²¹ Geo-6 is at <https://www.unep.org/resources/global-environment-outlook-6>

²² <https://www.unep.org/gan/resources/report/making-peace-nature-scientific-blueprint-tackle-climate-biodiversity-and-pollution>

²³ "We Must Act Now To Save Sustainability," vol. 618, p. 647, *Nature* (22 June at2023),

²⁴ <https://www.weforum.org/agenda/2023/06/planetary-boundaries-scientists-earth-commission/>

²⁵ See IPCC Special Report, at <https://www.ipcc.ch/sr15/>.

Natural resources law emerged to regulate the exploitation of nature, so that there could be sustained yields of timber, fish, soils for farming, water and conservation of nature. Environmental Law was added to provide for controls on pollution to ensure environmental quality. Both fields of law assumed that the Biosphere could withstand the harms that humans were inflicting upon it. Scientific evidence has now proven these assumptions to be false. Nonetheless, the laws enacted over the past 150 years around the world still assume that the environment can withstand some human harm to the environment some harm. Humans have depleted biodiversity and caused the extinction of species. Humans have created chemicals that cannot be eliminated from the biosphere and in turn begin to harm the human species. Humans have depleted local water supplies in a world rich in water.

Now we humans have run out of time to fix these problems.²⁶

So, if Ecological Civilization is to succeed, will it not be essential to revise expectations about *when* it can be attained? New timelines must be studied. New tools to accelerate measures to attain Ecological Civilization will be needed. Planning and reform will need to become adaptive, and new means designed to adjust to radically changed environmental circumstances. When a flood wipes out a community and infrastructure, it will be important not to rebuild “as it was”, but rather to have new ecologically designed systems to leap ahead to new systems based on the precepts of Ecological Civilization.

Studies to do so have begun. For example, the Asian Development Bank has assessed resilience in the context of China’s participation in international supply chains.²⁷ This sort of analysis is useful in all sectors. To succeed, China (like every other nation) will need to adapt the Principle of Resilience to further its mission of attaining Ecological Civilization. This is not, of course, a uniquely Chinese challenge, but China has the advantage of having adopted Ecological Civilization as the vehicle for maximize resilience.

China is well positioned to share this leadership. For example, in Southeast Asia China’s international cooperation through the Association of Southeast Asian Nations (ASEAN) is long-standing and can be accelerated.²⁸ The Asian Development Bank has studied resilient infrastructure financing regionally.²⁹ Environmental legal scholars in ASEAN should study the principles and practices of Ecological Civilization, so that regionally the reforms in China can be mirrored and reinforced by similar reforms in different Members of ASEAN.

²⁶ Nicholas A. Robinson, “Depleting Time Itself: The Plight of Today’s ‘Human’ Environment,” *International Policy and Law*, vol. 51, pp. 361-369 (2021), DOI .10.3233/EPL-219016 at <https://content.iospress.com/download/environmental-policy-and-law/epl219016?id=environmental-policy-and-law%2Fepl219016>

²⁷ “Resilience of Global Supply Chains: Facts and Implications,” Asian Development Bank (June 2023) at <https://www.adb.org/publications/resilience-of-global-supply-chain-facts-and-implications>.

²⁸ Koh, Kheng-Lian, Nicholas A. Robinson, and Lye Lin-Heng, *ASEAN Environmental Legal Integration* (Cambridge University Press, 2016).

²⁹ “Reinvigorating Financing for Sustainable and Resilient Infrastructure in ASEAN+3,” Asian Development Bank (May 2023), at <https://www.adb.org/publications/financing-sustainable-resilient-infrastructure-asean3>

China and ASEAN already have extensive cooperation. In 2003, China acceded to the Treaty of Amity and Cooperation in Southeast Asia, becoming a leading ASEAN “dialogue partner.” This relationship was elevated to “strategic partnership for peace and prosperity.” Since 2005, China and ASEAN have established more than some 46 mechanisms at various levels in 16 fields, including 12 at the level of ministers.³⁰ The time has come for each of these cooperative endeavors to be based on the norms of Ecological Civilization. Scholars can evaluate how ecological civilization, including the Principle of Resilience defined with Chinese characteristics, that may maximize measures for restoring human harmony with nature across a wider region, with benefits for China and beyond.³¹

4. *Using Environmental Impact Assessment to Attain Ecological Civilization*

Environmental Law has already developed important legal procedures to identify the practical and applied ways to attain ecological civilization. Legal scholars need to identify why these procedures are not yet used to do so. Potentially the most effective legal tool for identifying ecological resilience in the context of governmental decision-making is *environmental impact assessment* (EIA). China’s The Environmental Impact Assessment legislation (环境影响评价法) is Law of the People's Republic of China on Evaluation of Environmental Effects. China was among the first nations to design and adopt an EIA law. The EIA revisions since 2015 attracted international interest.³² Experience has been gained about EIA and public participation. China has used EIA effectively for evaluating proposed projects. China now can deploy EIA as a tool to identify mitigation and adaptation opportunities in the context of climate change. China can be a leader in using EIA to find points of resilience to make society more sustainable. EIA should be used widely, throughout all decision-making.

³⁰ See Rakhahari Chatterjee, China’s Relationship with ASEAN: An Explainer,” ORF Issue Brief No. 459 (April 2021), Observer Research Foundation, at <https://www.orfonline.org/research/china-relationship-asean-explainer/>.

³¹ The applicability of the Principle of Resilience for ecological civilization is featured in my article, “Ecological Civilization and Legal Norms for Resilient Environmental Governance, Vol.4.2 *Chinese Journal of Environmental Law* (REIL Wuhan/Brill), 2020, p. 131 at pp. 155-161.

³² Yang Yang, “Reformed Environmental Impact Assessment in China: An Evaluation of its Effectiveness,” *Journal of Environmental Protection*, vol. 11.10 (Scientific Research, October 2020), DOI [10.4236/jep.2020.1110056](https://doi.org/10.4236/jep.2020.1110056) at <https://www.scirp.org/journal/paperinformation.aspx?paperid=103618>. See also article at <https://www.scirp.org/journal/paperinformation.aspx?paperid=103618>: “In China, public participation was initially proposed in an EIA training programme in 1991. (China’s EIA Law (2003) SCNPC, 2003), which was amended in 2016 (SCNPC, 2016) and 2018 (SCNPC, 2018), together with the Regulation of Plan EIA (2009) and Measures for Public Participation in EIA (2018) (MEE, 2018), serves as the legal foundation and systematic framework for public participation in both Plan EIA and Project EIA. Affected by the reform of the political system, which aims to restructure governmental departments and to rebuild the relationship between the government and the public, public participation has become an important part of the decision-making system,” citing D. Brombal *et al.* “Evaluating public participation in Chinese EIA. An integrated Public Participation Index and its application to the case of the New Beijing Airport” in *Environ. Impact Assess. Rev.* (2017).

There are techniques for using EIA to cope with mitigation and adaptation of climate change.³³ The UN Framework Convention on Climate Change (UNFCCC), in Article 4 (f),³⁴ provides that EIA may be developed as a tool to address the impacts of climate change. This tool of environmental law is an important means for attaining Ecological Civilization. Similarly, Article 14 of the Convention on Biological Diversity provides for using EIA to assess impacts on biodiversity and ways to enhance conservation of biodiversity. Techniques for doing so have been identified.³⁵ The Convention on Biological Diversity provides a wide range of case studies of using EIA.³⁶ Thus, environmental law scholars have ample applications of using EIA to “make peace with nature.” It remains for scholars to examine and enhance this initiative, to educate about how EIA serves Ecological Civilization, and to strengthen EIA with Chinese characteristics. The assessment procedure through EIA will also facilitate accountability for ensuring environmental protection.

5. *Ecological Civilization: The Foundation for the Future*

Without a stable environment on Earth, scientists increasingly warn that human life as we have experienced it during the Earth’s Holocene Epoch cannot continue. Ecological Civilization would ensure that this “future” of hardship is averted. Pollution can be ended. Hydrogen, wind, solar, nuclear and other non-fossil fuel sources of energy can be rapidly deployed. Green plants can be planted and cared for everywhere. The beauty of nature can inspire vigorous action to conserve life.

But if we wish to attain this as our future, is it not evident that we shall need to act more rapidly and more pervasively than ever? Scientists in every part of the planet warn that the human species is running out of time.

The UN World Meteorological Organization (WMO) advised in May of 2023 that there is about a 40% chance of the annual average global temperature, temporarily, reaching 1.5° Celsius (2.7 degrees Fahrenheit) above the pre-industrial level in at least one of the next five years. These odds are increasing with the passage of time, and continuing increases in the

³³ “EIA Guidelines for Assessing the Impact of Climate Change on a Project,” Sabin Center for Climate Change Law, Columbia University, at <https://climate.law.columbia.edu/content/eia-guidelines-assessing-impact-climate-change-project>

³⁴ (f) Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change;” At <https://unfccc.int/resource/docs/convkp/conveng.pdf> .

³⁵ Silvia Sayuri Mandai and Marcelo Marini Pereira de Souza, “Guidelines for the analysis of the inclusion of biodiversity in Environmental Impact Statements,” *Environmental Impact Assessment Review*, vol. 87 (March 2021), <https://doi.org/10.1016/j.eiar.2020.106523> , at <https://www.sciencedirect.com/science/article/abs/pii/S0195925520308015#:~:text=Article%2014%20of%20the%20Convention%20on%20Biological%20Diversity,is%20a%20significant%20instrument%20for%20site-specific%20impact%20prediction.>

³⁶ See, <https://www.cbd.int/impact/> .

emissions of greenhouse gases into the atmosphere.³⁷ The WMO Congress approved its *Strategic Plan 2024-2027* to promote WMO's vision that by 2030, all nations will see a world where all, especially the most vulnerable nations, will be more **resilient** to the socioeconomic consequences of extreme weather, climate, water and other environmental events.³⁸

The great promise of Ecological Civilization is that China can lead the way to realize the vision that WMO has so recently provided. The natural features of Earth's biosphere, like the hydrologic cycle, bond all countries and peoples in their shared home. The international law principle of solidarity obliges all countries and economies collaborate to stabilize the ambient environmental conditions for life on Earth. What, may we ask, can environmental law scholars do to accelerate the measures needed to attain Ecological Civilization, while time permits?

Thank you for considering these ideas. We have much to discuss.

³⁷ <https://news.un.org/en/story/2023/05/1136732> .

³⁸ <https://public.wmo.int/en/media/press-release/world-meteorological-congress-sets-new-strategic-priorities-era-of-rapid-climate> .