The Planetary Future

Marshalling the Planetary Trust

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Abstract. Conserving the Earth System represents a public good, global as well local. In today's kaleidoscopic world, we must engage all the actors to cooperate with the shared goal of caring for and maintaining planet Earth in trust for present and future generations. The UN Summit of the Future is an opportunity to embark on six critical strategies: commitment to consider the future and reaffirm intergenerational equity; representation to future generations; monitoring, assessment and collection of lessons learned; scientific and technological research and development; institutional development; and education and raising of public consciousness. The financial and commercial sectors must consider the future in decision-making.

Keywords: Intergenerational equity, natural resources, planetary trust, kaleidoscopic world, national security, climate change

1. Introduction

When the planetary trust was conceived, States had begun to recognize that we have *Only One Earth.*¹ It was not yet clearly established that human activities could wreak irreversible damage to the whole planet. Pollution of air, water, land and oceans was evident, as was destruction of biodiversity and contamination of soils, but States were only beginning to address these issues, in part through the newly established United Nations Environment Programme. Recognition of climate change was still in its infancy, as was the understanding of the role of economics and politics in environmental issues. The Villach, Austria, meeting of interdisciplinary climate experts took place in 1985; the Intergovernmental Panel on Climate Change (IPCC) was formed only in 1988.

In 1984, I proposed that "the human species holds the natural and cultural resources of the planet in trust for all generations of the human species... This planetary trust obligates each generation to preserve the diversity of the resource base and to pass the planet to future generations in no worse condition than it receives it. Thus, the present generation serves both as a trustee for future generations and as a beneficiary of the trust." The book *In Fairness to Future Generations*, published by the United Nations University and Transnational Publishers, 1989, further developed the concept of the planetary trust, a concept that recognizes that we all share one Earth and have a fiduciary obligation to conserve it for future generations. It rests on a normative framework. In fulfilling our role as trustees, we can draw upon normative teachings shared by nearly all cultures concerning intergenerational cooperation and conflict. Principles of intergenerational equity are at the heart of the trust. Intragenerational equity flowing from the trust applies to the present generation as beneficiaries.

- 1 Barbara Ward and René Dubos (1972), Only One Earth: The Care and Maintenance of a Small Planet (W.W. Norton).
- 2 Edith Brown Weiss (1984), "The Planetary Trust: Conservation and Intergenerational Equity", Ecology L. Q., 11:495, 495-581.
- 3 Translated and published in Japanese (1990), French (1993), Spanish (1999) and Chinese (2000). The UNU supported four advisors for the project from Brazil, China, France, and India.

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We are witnessing the onset of the Anthropocene Epoch and recognizing that we must address the Earth System in considering the future. The Earth System integrates our human life with that of the natural system and our social systems. In the Anthropocene, humans are the dominant force. We are shaping the planet on a geological scale and doing so rapidly. The carbon, nitrogen and hydrological cycles are accelerating. Biodiversity is rapidly declining, with one million species of animals and plants threatened with extinction, many within a decade.⁴ Oceans and fish stocks are threatened, and coral reefs are dying. Our planet is warming at a rate that could lead to the crossing of thresholds or tipping points that could produce catastrophic changes. In addition, we face a higher threat of nuclear war, cyber wars, pandemics, threats from gene drivers that can cause inheritable changes to genes, and potential threats from other new technologies such as artificial intelligence. The threats to future generations resulting from human activities make applying the normative framework of a planetary trust even more urgent than in past decades.

In September 2024, the United Nations will hold a Summit of the Future, which is the culmination of efforts to recognize and act upon the need to consider the future. This article considers the planetary trust in the context of today's kaleidoscopic world, reviews important developments in implementing the trust, and focuses on important steps to take now to ensuring a robust Earth System that is just for present and future generations. This article incorporates a revised and updated version of the article entitled "The Future of the Planetary Trust in a Kaleidoscopic World." ⁵

2. Revisiting the Planetary Trust

Conserving our planet represents a public good, global as well local. Initially, the planetary trust focused primarily on threats to the natural system of our human environment such as pollution and natural resource degradation, and on threats to cultural heritage. The trust inherently covers all actions that can affect the sustainability of the planet. As we look to the next fifty years, we need to revisit the scope of the planetary trust to encompass explicitly other diverse and increasing threats to our planet, such as those from nuclear and other weapons, biotechnology, cyber technology and artificial intelligence. These will affect our human environment and the health of the planet.

We also need to emphasize that the reach of the planetary trust extends to local actions that have broader effects. The lesson of the last fifty years is that increasingly what happens at the local levels can have large-scale, even global effects. For example, policies on energy sources and energy use, land use and urban design affect the viability of the planetary trust. Corporate practices regarding energy resources and use have potentially long-term and intergenerational implications. Taken individually, they may not have long-term effects. Taken cumulatively and across the planet, they do.

The world today is far different from that of fifty or even thirty years ago, when most of our initial legal instruments to address environmental change were developed.⁶ Information technology has enabled what I have termed a kaleidoscopic world, with rapid change, new and challenging problems, many diverse actors, and fluctuating patterns of interaction among the actors.⁷ This complicates efforts to conserve our planet. Governments, private sector businesses, formal and informal groups and networks, and billions of people can communicate instantaneously across the world. For example, Tumblr hosted 592 million blogs as of January 2024.⁸ Over 409 million people view more than 20 billion pages of WordPress each month; WordPress blogs are written in over 120 languages.⁹ Over 5.6 billion people use a mobile phone today; and Instagram has

- 4 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, IPBES Global Assessment on Biodiversity and Ecosystem Services (Eduardo Brondizo et al. eds., 2019).
- 5 Edith Brown Weiss (2020), "The Future of the Planetary Trust in a Kaleidoscopic World", Env't L. & Pol.'y 50:449-456.
- For example, the United Nations has 193 member States, while the Yearbook of International Organizations records 7,868 intergovernmental organizations and 68,112 nongovernmental organizations. 1B Union of International Associations, Yearbook of International Organizations 2023-2024, at xxv tbl.2 (60th ed. 2023).
- 7 Edith Brown Weiss (2019), "Intergenerational Equity in a Kaleidoscopic World", Env't L. & Pol.'y 49:3-11.
- 8 About, Tumblr, https://www.tumblr.com/about (last visited Jan. 26, 2024).
- 9 A live look at activity across WordPress.com, WordPress, https://wordpress.com/activity/ (last visited Jan. 28, 2021).

roughly 2 billion active monthly users.¹⁰ Users of X (formerly Twitter) spend over 7.8 billion active minutes on the platform daily.¹¹ Information technology enables bottom-up empowerment. (Recent developments indicate that it can also facilitate top-down control.)

Many actors in addition to States can undertake initiatives for sustainable use and conservation, organize coalitions to build pressures on others to do so, and help monitor actions of others. This promises many benefits. At the same time, the anarchic features of the kaleidoscopic world make implementing the public good of protecting the planet quite challenging. Information technology has facilitated those groups and individuals who actively want to oppose environmental goods or to undermine the rule of law, which is detrimental to working for a public good.

At the moment, the future of the planetary trust is in danger. Countries are largely focused on short-term problems and national actions. Research suggests that people do cooperate when they are locked together in the same environment over time and must confront the shadow of the future.¹² To avoid situations from getting worse or to obtain benefits that they cannot capture individually, they turn to cooperation. For the planet, this means that when people realize that they have to cooperate to avoid dire consequences to the planet, they may then be willing to take needed steps from which others will also benefit. So long as States view the situation as a zero-sum game, as has been the custom in matters of national security, this will not happen.

3. The Record in Implementing the Planetary Trust

Does the past offer some hope for the future? Here, significant developments in the last two decades in considering future generations and intergenerational equity, the foundation of the planetary trust, offer hope. States, international organizations, civil society, and other groups and networks have begun to think about the future. At the ethical level, Pope Francis in his Encyclical Laudato si' "Our Common Home" pronounced the natural environment to be "a collective good, the patrimony of all humanity and the responsibility of everyone." He noted that intergenerational solidarity is an important part of sustainable development and can no longer be ignored. The United Nations General Assembly responded to his presentation with sustained applause. The United Nations is actively engaged, as reflected currently in Our Common Agenda and in the planning of the forthcoming Summit of the Future.

Many of the important developments in incorporating the future have taken place in judicial litigation, institutional arrangements within or among countries, national constitutional provisions, national legislation in a specific sector such as mining, international initiatives, and high-level reports and other documents. Nongovernmental organizations, religious bodies, and the private sector have contributed significantly. They point the way to enlisting everyone to conserve our shared inheritance.

3.1. Judicial Litigation

Litigation in courts is an important venue for affirming obligations to future generations. In the last several decades, international, regional, national, and local courts have increasingly considered future generations. Some of these developments are detailed below.

- 10 Data, GSMA Intel., https://www.gsmaintelligence.com/data/ (last visited Jan. 28, 2024); Stacy Jo Dixon, Instagram Statistics & Facts, Statista (Jan. 10, 2024), https://www.statista.com/topics/1882/instagram/#topicOverview.
- Linda Yaccarino, One year in, the future of X is bright, X Blog (Oct. 26, 2023). https://blog.twitter.com/en_us/topics/company/2023/one-year-in. For earlier data, see @TwitterIR, Q2 2020 Letter to Shareholders (2020), https://investor.twitterinc.com/files/doc_financials/2020/q2/Q2-2020-Shareholder-Letter.pdf.
- 12 See e.g., Robert Azelrod (1984), The Evolution of Cooperation (Basic Books); Scott Barrett (2007), Why Cooperate? The Incentive to Supply Global Public Goods (Oxford University).
- 13 Pope Francis, Encyclical Letter Laudato si' of the Holy Father ch. 2, §VI, para 23 (May 24, 2015).
- 14 See e.g., United Nations, Our Common Agenda, Report of the Secretary General (2021); United Nations, A Breakthrough for People and Planet, Report of the High-Level Advisory Board on Effective Multilateralism, (2023). For additional developments, see Brown Weiss, *supra* note 7.

The International Court of Justice explicitly referred to the interests of future generations for the first time in its 1996 *Advisory Opinion on the Use of Nuclear Weapons* when it referred to "generations unborn" as being affected by nuclear weapons. ¹⁵ Individual judges have invoked intergenerational equity in concurring and dissenting opinions, beginning in 1993 in *Denmark v. Norway* in then Judge Weeramantry's concurring opinion. ¹⁶ In both the *Pulp Mills Case on the River Uruguay* in 2010 and the *Whaling in the Antarctic* case in 2014, Judge Cançado Trindade discussed intergenerational equity. ¹⁷ In the latter case, he observed that "intergenerational equity marks presence nowadays in a wide range of instruments of international environmental law, and indeed of contemporary public international law." ¹⁸ The Inter-American Court of Human Rights has also raised the interests of future generations in its cases regarding the rights of indigenous peoples and transmitting their inheritance to future generations. ¹⁹

As of January 2024, four international courts had requests for advisory opinions or cases concerned with the interests of future generations: the International Court of Justice (ICJ), the International Tribunal for the Law of the Sea (ITLOS), the Inter-American Court of Human Rights (ICtHR) and the European Court of Human Rights (EHCR). All were in connection with climate change.

On March 29, 2023, the UN General Assembly (UNGA) requested an advisory opinion from the ICJ on Obligations of States in respect of Climate Change.²⁰ The request expressly asks the ICJ to identify States' obligations to future generations regarding climate change. The legal questions submitted are as follows: under Article 65 of the ICJ Statute, "(a) What are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations? (b) What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to: (i) States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change? (ii) Peoples and individuals of the present and future generations affected by the adverse effects of climate change?"

The ITLOS received a request in December 2022 from the Commission of Small Island States on Climate Change and International Law (the "Commission") to issue an advisory opinion on obligations relevant to climate change under the UN Convention on the Law of the Sea (UNCLOS).²² The Commission posed two legal questions: What are the obligations of States under the UNCLOS, including under Part XII, to prevent, reduce, and control marine pollution from the effects of climate change (e.g., ocean warming, sea level rise, and ocean acidification); and to protect the marine environment from climate change impacts.

In January 2023, the ICtHR received a request from Chile and Colombia on the Climate Emergency and Human Rights "to clarify the scope of State obligations, in their individual and collective dimension, in order to respond to the climate emergency within the framework of international human rights law, paying special attention to the differentiated impacts of this emergency on individuals from diverse regions and population groups, as well as on nature and on human survival on our planet." The request contains a series of legal questions, one of

- 15 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 241, ¶ 29 (July 8).
- 16 Maritime Delimitation in the Areas between Greenland and Jan Mayen (Den. v. Nor.), Judgment, 1993 I.C.J. Rep. 38, 277 (June 14) (concurring opinion by Weeramantry, J.).
- 17 Pulp Mills on the River Uruguay (Arg. v. Uru.), Judgment, 2010 I.C.J. Rep. 14, 181 (April 20) (separate opinion by Cançado Trindade, J.); Whaling in the Antarctic (Austl. v. Japan; N.Z. intervening), Judgment, 2014 I.C.J. Rep. 226, 366 (February 6) (separate opinion by Cançado Trindade, J.).
- 18 Whaling in the Antarctic, *supra* note 17, at ¶ 47.
- 19 See, e.g., The Mayagna (Sumo) Awas Tingni Community v. Nicaragua, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 79, (Aug. 31, 2001).
- 20 Obligations of States in respect of Climate Change, Request for Advisory Opinion transmitted to the Court pursuant to General Assembly resolution 77/276 of 29 March 2023, 2 (Apr. 12, 2023), https://www.icj-cij.org/sites/default/files/case-related/187/187-20230412-app-01-00-en.pdf.
- 21 Id.
- 22 Request for Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law, Case. No. 31, Request for an Advisory Opinion of 12 December 2022, ITLOS, https://www.itlos.org/fileadmin/itlos/documents/cases/31/Request_for_Advisory_Opinion_COSIS_12.12.22.pdf.
- 23 Request for an advisory opinion on the Climate Emergency and Human Rights submitted to the Inter-American Court of Human Rights by the Republic of Colombia and the Republic of Chile, IACtHR (Jan. 9, 2023), https://www.corteidh.or.cr/docs/opiniones/soc_1_2023_en.pdf.

which addresses State's differentiated obligations regarding the rights of children and new generations in light of climate change, recognizing their relative greater vulnerability in the long term, and raising the issue of standing.

Three cases on the issues of State action on climate change were brought to the ECHR.²⁴ On April 9, 2024, in a landmark judgment, the European Court of Human Rights Grand Chamber decided that the Swiss Government's actions on climate change were insufficient and violated Article 8 of the European Convention on Human Rights, which encompasses "a right for individuals to enjoy effective protection by the State authorities from the serious adverse effects of climate change on their lives, health, well-being and quality of life." *Verein KlimaSeniorinen Schweiz v. Switzerland* (paras 519,544). It declined jurisdiction in the other two cases.

Significant judicial advances in implementing planetary trust and intergenerational equity have come in national and subnational courts or in environmental courts in countries, and in cases other those relating to climate change. National courts in more than 20 countries have invoked intergenerational equity or considered the interests of future generations in reaching their decision. The cases stretch across Europe, South Asia, Africa, Latin America and North America.²⁵

A central goal of such litigation is to bring about change – in climate related policies, in sectors such as mining, in protection of biodiversity, as in the Amazon, in control of pollution and in natural resource management. Litigants have had some success both on procedural issues, such as standing to sue,²⁶ and on substantive issues. In the climate cases, for example, the Supreme Court of The Netherlands ordered the government to reduce by 2020 GHG emissions by 25% of the 1990 s levels, while the Lahore High Court in Pakistan ordered the creation of a Commission on Climate Change.²⁷ In an historic case in Germany, the Constitutional Court struck down parts of Germany's Federal Climate Protection Act for insufficiency in cutting emissions beyond 2030 and found that Article 2 (2) gave rise to a duty to protect others, including future generations.²⁸

Cases in India and in Colombia merit special attention because of the actions that the Supreme Courts ordered for mining and for protection of biodiversity. In 2014 in a mining case in the State of Goa, the Supreme Court of India required as a condition to mine that a trust fund be established for the benefit of future generations and ordered the creation of Committee of Experts to find an appropriate ceiling for the annual excavation of iron ore to ensure the resources were available into the future.²⁹ In August 2017, the Supreme Court issued an historic judgment in a large-scale mining case in Odisha in which it ordered the Government of India to issue a new National Mineral Policy.³⁰ The new policy (2019) provides that "natural resources, including minerals, are a *shared inheritance* (italics added) where the State is a trustee on behalf of the people", includes a new section entitled "Intergenerational Equity," and establishes an Inter-Ministerial body to institutionalize sustainable mining "keeping in mind the principles of sustainable development and intergenerational equity."³¹

In Colombia, the Supreme Court found that the Colombian government had not effectively tackled the problem of Amazon deforestation, despite international commitments and national legislation. In its judgment, the Court ordered the Presidency of the Republic, the Ministry of Environment and Sustainable Development, and the Ministry of Agriculture and Rural Development to formulate an Intergenerational Pact for the life of the Colombian Amazon. The Court expressly noted that "natural resources are shared by all inhabitants of

- 24 Three cases were pending in the Court. *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, Eur. Ct. H.R. (Mar. 17, 2021); Judgment No. 087, Eur. Ct. H.R. (April 9, 2024); *Carême v. France*, App. No. 7189/21, Eur. Ct. H.R. (Jun. 7, 2021); *Duarte Agostinho and Others v. Portugal and Others*, App. No. 39371/20, Eur. Ct. H.R. (Sept. 27, 2023).
- 25 See Edith Brown Weiss (2020), Establishing Norms in a Kaleidoscopic World (Brill/Nijhoff), 293-307.
- 26 In a landmark decision, the Supreme Court of The Philippines accorded standing to sue to children as representing future generations, *Minors Oposa v. Sec'y of the Dep't of Env't and Nat. Res.*, 224 S.C.R.A. 792 (July 30, 1993) (Phil.).
- 27 Urgenda Foundation v. State of the Netherlands, 19/00135 HR (Dec. 20, 2019) (Neth.); Leghari v. Federation of Pakistan, W.P. No. 25501/2015 Lahore High C. (Jan. 25, 2018) (Pakistan).
- 28 Neubauer et al. v. Germany, 1 BvR2656/18, Rn. 1-270 Bundesverfassungsgericht (BHG), (Mar. 24, 2020) (Ger.).
- 29 Goa Foundation v. Union of India & Others., 435 SCC 2012 (Apr. 21, 2014) (India). Claude Alvarez and Rahul Basu (2023), The Supreme Court and Intergenerational Equity: The Goa Mining Case.
- 30 Common Cause v. Union of India & Others, SC WP 2014 (Aug. 2 2017) (India).
- 31 See Articles 1, 10, and 11, Government of India, National Mineral Policy 2019, https://mines.gov.in/admin/storage/app/uploads/64352887bcfa41681205383.pdf, (last visited Jan. 28, 2024).

Planet Earth, and by their descendants or future generations who do not yet have a physical hold of them, but who are tributaries, recipients, and owners of them,"³²

One of the most recent developments is that lawsuits are now being filed against private companies for contributing to global environmental problems. In the United States and other countries, the litigation seeks to hold fossil fuel companies responsible for contributing to climate change. As of January 2024, cases were pending in the United States, and in at least eleven other countries: five in Argentina and in Brazil, three in Australia, two in France, and at least one case in Germany, Italy, Japan, the Netherlands, New Zealand, Poland, and the United Kingdom.³³ United States litigation has focused on suing Exxon, a major fossil fuel company. A majority of suits against Exxon and other fossil fuel companies have been brought by states and cities, which filed five new lawsuits in 2020 against fossil fuel companies for contributing to the impacts of climate change.³⁴ Shareholders of ExxonMobil have also initiated suits against directors of the corporation, alleging violations of federal securities law, breach of fiduciary duty, waste of corporate assess, and unjust enrichment.³⁵

Many more cases could be cited as examples of using the courts to implement the planetary trust and to have the private sector act consistently with it. In some of these, the courts rely on national or state/provincial legislation. In others they rely on Constitutional provisions in their country. National legislation in some countries explicitly recognizes future generations. For example, Burkina Faso created a Fund for Future Generations as part of its law on sustainable development (2014).³⁶ The Philippines Environmental Policy (1977) recognizes the role of the government and present generations as guardians and trustees of the environment for future generations.³⁷ Wales enacted a Well-Being of Future Generations Act (2015), which established a Commissioner for Future Generations.³⁸ Australia and New Zealand have legislation addressing intergenerational equity.³⁹ These are but a handful of examples.

Increasingly national constitutions include provisions relating to future generations and to implementing the planetary trust. As of 2021, the constitutions of at least 81 States reportedly have provisions relating to future generations. ⁴⁰ Many provide for obligations to future generations; some refer to rights of future generations. Several invoke the concept of a trust. Bhutan's Constitution, for example, states that "[e]very Bhutanese is a trustee of the Kingdom's natural resources and environment for the benefit of the present and future generations." ⁴¹ The Constitution of Papua New Guinea 1975 (rev. 2016) expressly notes that natural resources and the environment are held "in trust for future generations."

- 32 Future Generations v. Ministry of the Environment and Others, Judgment No. 11001-22-03-000-2018-00391-01, at 20 (Apr. 5 2018), For a translation from Dejusticia, see *Climate Change and Future Generations Lawsuit in Colombia: Key Excerpts from the Supreme Court's Decision*, Dejusticia (Apr. 13, 2018), https://www.dejusticia.org/en/climate-change-and-future-generations-lawsuit-in-colombia-key-excerpts-from-the-supreme-courts-decision/.
- 33 Sabin Ctr. for Climate Change L., https://climatecasechart.com (last visited Jan. 22, 2024).
- 34 City of Charleston v. Brabham Oil Co. et al., Complaint (2020); State v. American Petroleum Institute, Complaint (Minn. 2020); City and County of Honolulu v. Sunoco LP, Complaint (2020); City of Hoboken v. Exxon Mobil Corp., Complaint (2020); State v. BP America Inc., Complaint (Del. 2020).
- 35 Montini v. Woods and VonColditz. v. Woods et al., consolidated cases (D.N.Tex. 2019). See https://climatecasechart.com/case/voncolditz-v-exxon-mobil-corp/.
- Dêcret No 2014-343/PRES du 12 mai 2014 promulguant la loi ndeg 008-2014/AN du 08 avril 2014 portant loi d'orientation sur le dêveloppement durable au Burkina Faso. 2014. J.O. Ndeg30., Art. 16, https://faolex.fao.org/docs/pdf/bkf139544.pdf (last visited Feb. 3, 2024).
- 37 Philippine Environmental Policy. 1977. Presidential Decree No. 1151, sections 1-4, https://www.officialgazette.gov.ph/1977/06/06/presidential-decree-no-1151-s-1977/#:~:text=It%20is%20hereby%20declared%20a,Filipinos%2C%20and%20(c)%20to (last visited Feb. 3, 2024).
- 38 Well-being of Future Generations (Wales) Act 2015, Part 2, section 18, https://www.legislation.gov.uk/anaw/2015/2/contents/enacted (last visited Feb. 3, 2024).
- 39 See Climate Change Response (Zero Carbon) Amendment Act 2019, sections 5M, 5ZC (New Zealand), https://www.legislation.govt.nz/act/public/2019/0061/latest/LMS183736.html (last visited Feb. 3, 2024); National Environment Protection Council Act 1995, art. 3.5.2 (Australia), https://www.legislation.vic.gov.au/in-force/acts/national-environment-protection-council-victoria-act-1995/005 rpl-main-content (last visited Feb. 3, 2024); Environment Protection and Biodiversity Act 1999, art. 3A (Australia).
- 40 Renan Araújo and Leonie Kessler (2021), "The Rise of the Constitutional Protection of Future Generations" 1:4 (LPP Working Paper Series Ndeg 7,).
- 41 Constitution of Bhutan 2008, art. 5(1).
- 42 Constitution of Papua New Guinea 1975 (rev. 2016), preamble §4.

One of the more recent developments is the recognition by several national and subnational courts of the rights of nature, namely rivers and forests, and a willingness to grant standing to representatives of those rights. This can be a means for implementing the planetary trust. The Supreme Court of Colombia recognized the Colombian Amazon as a "subject of rights", entitled to protection, conservation, maintenance and restoration led by the State and territorial agencies. After over a hundred years of legal battles over the status of the Whanganui River, New Zealand recognized the Whanganui River as having rights, because it has special significance for the Maori people. At least one country (India), however, has rejected recognizing a right for a river, namely for the Ganges and the Yamuna rivers, for a river is inanimate.

The movement to recognize rights of nature extends beyond the courts. The Universal Declaration on the Rights of Mother Earth recognizes the rights of the Earth as a being. 46 In Latin America, Ecuador's Constitution recognizes and provides for the protection of the rights of nature, 47 and Bolivia has passed legislation in 2020 on the Rights of Mother Earth. 48

The emerging willingness to accord rights to nature is significant for implementing a planetary trust because this approach posits that while we are part of the natural system, the system itself is entitled to protection. It expands the notion of what it means to be a trustee for the planet for future generations.

3.2. Implementing Institutions

The interests of future generations are normally not considered in decision-making today. They need to be. The high-level Oxford Martin Commission for Future Generations acknowledging the failure of decision-makers to consider future generations, developed recommendations for sustainable long-term decision-making.⁴⁹

Proposals for international institutions that consider the interests of future generations and implicitly the planetary trust have been part of the international dialogue since the preparatory meetings for the Rio+20 Conference in 2012. The 2013 Report of the United Nations Secretary-General on Intergenerational Solidarity set forth international institutional options for considering the interests of future generations.⁵⁰ The former Mary Robinson Foundation for Climate Justice proposed a Guardian for Future Generations at the United Nations,⁵¹ Another option would be a new position of Under-Secretary for the Future (or for Future Generations) at the United Nations, to give highest-level visibility to the issue.⁵² Preparations for the 2024 UN Summit of the Future reference the potential appointment of a Special Envoy for the Future at the UN and other institutional measures, as discussed below.

Some countries have adopted national institutions that explicitly consider future generations. The Network of Institutions for Future Generations, established after an international conference in Budapest, Hungary, in 2014, has compiled a list of these institutions, both past and present.⁵³ The institutions take different forms: an Ombudsperson for Future Generations tied to national parliaments (Hungary and formerly Israel), a Council for the Rights of Future Generations (briefly in France), a parliamentary Committee for the Future (Finland), the Authority for Sustainable Development and the Rights of Future Generations (Tunisia) and a Commissioner for

- 43 Ruling of the Supreme Court of Colombia Recognizing Rights to the Amazon Forest (Apr. 5, 2018).
- 44 Te Awa Tupua (Whanganui River Claims Settlement) Act, 2017 (New Zealand), art. 14. The statute grants legal rights to the Whanganui River.
- 45 India's Ganges and Yamuna rivers are 'not living entities', BBC (July 7, 2017), https://www.bbc.com/news/world-asia-india-40537701.
 The High Court of Uttarakhand had recognized such a right. Mohd. Salim v. State of Uttarakhand, Writ Petition (PIL) No. 126 of 2014 (High Court of Uttarakhand 2017).
- 46 Universal Declaration of the Rights of Mother Earth (Apr. 22, 2010).
- 47 Constitution of Ecuador 2008 (rev. 2015), art. 71.
- 48 Mother Earth Law and Integral Development to Live Well, Law No. 300 (2012) (Bolivia).
- 49 Oxford Martin Commission for Future Generations, Now for the Long Term (2013).
- 50 UN Secretary-General, Intergenerational solidarity and the needs of future generations: Report of the Secretary-General, UN Doc. A/68/322 (Aug. 15, 2013).
- 51 Mary Robinson Foundation, Future Generations, https://www.mrfcj.org (last visited Jan 24, 2024).
- 52 Ambassador Bo Kjellen of Sweden offered this suggestion in a conversation in November 2018.
- 53 Members, Network of Institutions for Future Generations, http://futureroundtable.org/en/web/network-of-institutions-for-future-generations/roundtable (last visited Jan. 28, 2024).

Future Generations (Wales). Such institutions have faced various political and other obstacles, but the bottom-up pressures that brought them into existence persist.

3.3. Nongovernmental Organizations and Civil Society

Nongovernmental organizations have been at the forefront in pushing for considering the interests of future generations in our planet. The renowned Jacques Yves Cousteau attracted five million signatures for a Bill of Rights for Future Generations, which he presented to the 1992 Rio Conference on Environment and Development.⁵⁴ His work led in significant part to UNESCO's Declaration on the Responsibilities of the Present Generations Toward Future Generations.⁵⁵ Many other civil society organizations, particularly the World Futures Council, have been actively striving to advance the agenda of protecting future generations. The more recent Goa Foundation in India, which is focused on mining, is at the same time addressing the revamping of our economic system to consider future generations. Some parts of the private sector, especially in Europe, have taken measures to consider long-term threats, including banks and industries promoting alternative energy resources. A concern for the future has attracted high-level attention in the last decade, as reflected in The World Economic Forum's establishment of a Network of Global Futures Council to promote innovative thinking about key issues for the future. The Network held its annual meeting in October 2023 and announced its work program for the coming year. ⁵⁶The World Economic Forum released its report on Global Risks in January 2024.⁵⁷

4. Growing Concern for the Future

This history is relevant to marshalling the planetary trust now to address the future. Viewed through an optimistic lens, it indicates that in the last few decades, the interests of future generations, and hence the trust, have become an active concern for many governments and for civil society worldwide. Youth are now leading the way.

Through a pessimistic lens, however, progress to date is dramatically insufficient. The pressures for decisions focused on the immediate term have largely triumphed, and most institutions have not rebalanced decision-making to consider both the immediate and long-term issues. We face global threats to our planet without parallel. The Doomsday Clock of the Bulletin of Atomic Scientists on the threats of climate change and nuclear war was advanced in January 2022 to 90 seconds before midnight, and remained there in 2024.⁵⁸

5. Priority Strategies for Marshalling the Planetary Trust

As we look ahead to the next century, we must urgently engage States and all actors to consider the future in all policies and decisions. As a first step, we need to recognize collectively that a *de facto* planetary trust exists and that we must take specific steps to implement it. Doing so is a global and local public good. In dealing with it, we must face the reality of a kaleidoscopic world in which no State or even group of States can go it alone. This means that virtually everyone must become involved. States, subnational governmental units, international institutions (both governmental and nongovernmental), indigenous peoples, local communities, private sector companies, financial bodies, civil society, religious bodies, and individuals have to be engaged.

- 54 In 2001, the Cousteau Society presented the petition with by then nine million signatures to the United Nations Secretary-General.
- 55 UNESCO Res. 1997/44, Declaration on the Responsibilities of the Present Generations Towards Future Generations 29 C (12 November 1997).
- 56 The Network of Global Future Councils, Concept Note 2023-2024, https://www3.weforum.org/docs/WEF_GFC_2023_2024_Concept_Note.pdf.
- 57 World Economics Forum, Global Risks Report (2023), https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf.
- 58 The Group of Elders presents the Doomsday Clock (Nelson Mandela founded The Elders in 2007). The Elders, http://www.theelders.org/ (last visited Jan. 25, 2024). (2024 Doomsday Clock Announcement), *Bulletin of the Atomic Scientists* (Jan. 23, 2024).

If we are to be effective in protecting and enhancing the planetary trust, we need to share common values in doing so. Norms that reflect these values provide the essential glue for the kaleidoscopic world enabling it to work toward the goal of conserving our planet for ourselves and future generations. Elsewhere I have identified basic norms that are widely shared among countries and by peoples.⁵⁹ They include the norms of cooperation, avoidance of harm, human dignity and equity, intergenerational equity, and accountability. The last norm is the one that makes implementation of the other norms effective. One can identify other norms that are in the process of emerging, such as transparency, or one that is urgently needed, such as a norm of respect for evolving scientific knowledge and an obligation to find out the facts underlying global problems, as through research in the natural and social sciences.⁶⁰ We need to affirm intergenerational equity as a principle of international law.

Six strategies should have priority in marshalling the planetary trust: a covenant or declaration concerned with the Future; representation to future generations; scientific and technological research and development; monitoring, assessment and collection of lessons learned; institutional initiatives; and education and public awareness efforts.

5.1. A Covenant or Declaration on Our Commitment to the Future

It is time for a Call to Arms to implement our planetary trust. A new Covenant or Declaration in which States acknowledge the grave risks to our planet and commit to addressing them together would send a badly needed signal that ensuring the survival of our planet with a robust human environment is a top priority. The UN Summit of the Future is expected to produce a Declaration. While the proposed Covenant or Declaration may be nonbinding, it could nonetheless serve as a Call to Arms for States and for all peoples to commit to saving the robustness and integrity of our shared common home, our planetary trust. The UN could invite entities in addition to States to join the Covenant or Declaration in some manner or to draft their own complementary Covenants, or Declarations. As part of the Rio Conference on Environment and Development in 1992, civil society drafted a complementary Earth Charter. Our youth should welcome such commitments, for they have the most to lose if we fail to act. A Covenant or Declaration can be an empty document, unless States and the many other actors implement it. But it is a start to addressing the future. In the kaleidoscopic world, we urgently need a new commitment to work together to consider the long-term and the robustness of our Earth system.

Protecting the planet is a matter of national security for all countries. The dangers to our planet threaten social and political stability, and hence national security. Often national security is viewed as a zero-sum game, in which a gain by one is at the expense of the other. But national security needs to be redefined in the context of the planetary trust. We are dealing with a common good, and to protect the common good, we have to cooperate. This is in everyone's interest. Thus, we need to acknowledge that for some activities, countries and other actors are in competition with each other, but for others, namely conserving our planetary trust, they need to cooperate. The challenge is to identify actions for which cooperation is needed and to protect against the weak link in the group and the free riders. Declaring that protection of the planetary trust is an issue of national security will raise the profile of the problem and the priority to addressing it.

5.2. Representation to Future Generations

We need to give representation to future generations in decision-making, either by a formal institutional measure or by other means of ensuring that their interests are considered, as a counter to the inherent incentives in government and in business to emphasize the short-term in decision-making. This representation needs to be done at multiple levels and in multiple fora. As one step in judicial or administrative proceedings, an ombudsperson or other office could be established to intervene or to ensure that relevant laws are observed, to investigate complaints of abuse, or to provide warnings of problems implicating the future. Parliamentary committees on the future could be expanded. At the local level, communities could become engaged in giving representation to future generations, including by including youth in certain decisions affecting their long-term interests.

- 59 Edith Brown Weiss, supra note 25.
- 60 Charles Weiss (2022), The Survival Nexus: Science Technology and International Affairs (Oxford University).

5.3. Scientific and Technological Research and Development

A strategy for the future needs to include scientific research and technological development in order to identify and understand changes in our planet and the interactions between societies and the Earth System, to warn of threats to the Earth System, to developing alternative resources, to increasing the efficiency of using and extracting resources, to identifying the impacts of our actions on the future and to enabling us to address effectively the critical issues of fairness to present and future generations. We should consider ways in which scientists from diverse countries can come together to address these problems and institutions that can facilitate scientific and technological cooperation, with public and/or private financing. The International Institute for Applied Systems Analysis (IIASA) offers an example of collaboration on longer-term problems.

5.4. Monitoring, Assessment, and Lessons Learned

As is widely recognized, we need to monitor the status of our planet, the diversity and quality of our natural resources, the conservation of our cultural resources, and the impact of our actions on the future. There are already many programs on the first three items, which can be brought together, expanded, and, importantly, maintained and kept accessible. New measures will be needed for the latter.

Assessment of our actions on future generations is critical. While environmental impact assessments can and should consider long-term effects, they often do not. Moreover, assessments of the future are relevant to more areas than the environment. We could designate these as intergenerational assessments, which could be developed at various levels in different sectors or problem areas, and for different actors, whether public or private.

An ongoing compilation and synthesis of "lessons learned" could be appropriate for all actors in considering actions to guard against harm to future generations and to bring sustainable development and benefits to future generations. While important initiatives for this now exist, it would be useful to pull together these initiatives and to provide accessible networks for all actors to obtain and use the information. Artificial intelligence may be useful in identifying common themes and actions across diverse areas and sectors.

5.5. Institutional Initiatives

The Summit of the Future is addressing the institutionalization of a commitment to consider the future. The Policy Brief 1 of the UN's Our Common Agenda indicates that the UN Secretary-General intends to appoint a Special Envoy for Future Generations and is considering establishing a Commission or other institution. United Nations action could send a critical signal that our actions affect the future, that we need to consider the impact of our actions on the future of the planet and our well-being, and that all States and the worldwide community are committed to this task. The Envoy could serve as a focal point for reliable data and information about threats to the planet as well as a source for success stories in avoiding or undoing harm and in conserving the planet, especially in local communities. The Envoy could be critical in raising public consciousness among States and at all levels about the future. Such a position could also be created in UN specialized agencies and related institutions. Institutional representation for the future could be established in many different settings.

One option in the future would be the creation of a Commission on the Future, which might be created as an independent institution.⁶¹ It could serve many of the functions identified in Our Common Agenda. The diverse actors in the kaleidoscopic community urgently need a forum where they can identify, assess and deal with threats to the Earth System and find ways to cooperate in addressing them. A Commission or another institutional form could serve this function. Initially a Commission could have a time- limited mandate, which might lead to the formation of a permanent Commission.

5.6. Education and Public Awareness

As noted earlier, we need to raise consciousness worldwide about the need to consider the future. Youth are already at the forefront of demanding that we consider the impact of our actions on the future and that we take measures to conserve the planet for them and for future generations. We need now to focus on education at all generational levels. Specific steps for education include developing more learning materials for all educational levels (elementary school to adult), expanding effective access to such materials, and developing more programs that build the capacity and skills to plan for the future. General change in our attitudes and actions allegedly takes place on the time-scale of a generation. This means that we must give priority to including youth in our programs and educating children about frameworks that include the future.

6. Engaging the Private and Financial Sectors

Marshalling the planetary trust must involve actors beyond governments. The commercial and financial sectors are essential. Companies need to embed sustainability and long-term assessments into their decision-making at all levels. This has become a regulatory requirement in some jurisdictions. The European Union's Corporate Sustainability Reporting Directive (CSRD) requires EU-incorporated companies to disclose information about how environmental, social and governance (ESG) impacts affect a company's business and how that business affects other sustainability issues. ⁶² EU companies are increasingly incorporating climate data and risk assessments into decision-making at all levels of a company and holding employees accountable for doing so⁶³

In the United States, the process for requiring companies to disclose climate risk has been slow. The United States Security and Exchange Commission (SEC) issued Commission Guidance Regarding Disclosure Related to Climate Change in 2010. In March 2022, the SEC proposed a rule requiring companies registered with the SEC to include certain climate-related disclosures in their information for investors, but the SEC is still receiving comments on the proposal, as part of the administrative requirements for adopting new regulations.⁶⁴

Systems of decision-making that assess long-term impacts could extend to other commercial activities. For example, integrating climate change and other long-term assessments into decision-making is especially important for insurance and re-insurance companies.

The financial sector is critical to marshalling a planetary trust. Some positive developments exist. The European Central Bank is exploring ways to combat climate change. It considers climate change in four areas: economic analysis, banking supervision, monetary policy and investment portfolios, and financial stability. As part of its monitoring role of banks, it monitors the carbon intensity of the portfolios of banks and has been developing a climate risk stress-test analysis for the euro area banking sector. The International Monetary Fund considers climate change as potentially affecting macroeconomic and financial stability. In 2022, it established a Resilience and Sustainability Trust (RST) to provide longer-term, affordable financing for low-income and vulnerable middle-income countries to address long-term challenges, including climate change. In 2023, The World Bank changed its mantra to be that of ending poverty on a livable planet. The President has announced that about 45% of its projects would deal with climate change. Apart from these efforts by multilateral institutions, private banks are also important partners in ensuring the common good of a healthy and vibrant planetary trust. Some have begun to consider long-term effects in their work.

- 62 Council Directive 2022/2464, O.J. (L 322/15) (EU).
- 63 *Id*.
- 64 The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 FR 29059 (May 12, 2022).
- 65 Kristalina Georgieva and Rhoda Weeks-Brown (2023), "The IMF's Evolving Role Within a Constant Mandate", *J.Int'l Economic L.*, 1-13, https://doi.org/10/1093/jiel/jgac064.
- 66 The IMF and Climate Change, https://www.imf.org/en/Topics/climate-change#:~:text=Mitigation,achieve%20their%20Nationally% 20Determined%20Contributions. (last visited Jan. 26, 2024); Resilience and Sustainability Trust, IMF, https://www.imf.org/en/Topics/Resilience-and-Sustainability-Trust (last visited Jan. 26, 2024).
- 67 Climate Change, The World Bank, https://www.worldbank.org/en/topic/climatechange/overview (last visited Jan. 26, 2024); World Bank Group at COP28, https://live.worldbank.org/en/series/2023/cop28 (last visited Jan. 26, 2024).

7. Conclusion

The bottom line in projecting ahead is that for marshalling the planetary trust we need all the actors in our kaleidoscopic world to develop and implement systems for systematically considering threats to the planet and the impact of our actions on the future. This also applies to actions that could directly benefit future generations. At first, it may be viewed as innovative to consider such long-term effects systematically, but then it should become accepted and routine.

There are many other initiatives that might be highlighted, including new international agreements, nonbinding or soft law instruments, or voluntary commitments by States to address particular problems or the planetary trust more generally. States are essential. But in the kaleidoscopic world, we must engage many more actors to cooperate with the shared goal of caring for and maintaining planet Earth in trust for present and future generations. Youth are central to this effort. The need for these measures is urgent. Time may be running out.