Advance Unedited Version

Distr.: General
25 June 2019

Original: English

Human Rights Council
Forty-first session
24 June–12 July 2019
Agenda item 3
Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development

Climate change and poverty

Report of the Special Rapporteur on extreme poverty and human rights*

Summary

Climate change will have devastating consequences for people in poverty. Even under the best-case scenario, hundreds of millions will face food insecurity, forced migration, disease, and death. Climate change threatens the future of human rights and risks undoing the last fifty years of progress in development, global health, and poverty reduction.

Staying the course will be disastrous for the global economy and pull vast numbers into poverty. Addressing climate change will require a fundamental shift in the global economy, decoupling improvements in economic well-being from fossil fuel emissions. It is imperative this is done in a way that provides necessary support, protects workers, and creates decent work.

Governments, and too many in the human rights community, have failed to seriously address climate change for decades. Somber speeches by government officials have not led to meaningful action and too many countries continue taking short-sighted steps in the wrong direction. States are giving only marginal attention to human rights in the conversation on climate change.

Although climate change has been on the human rights agenda for well over a decade, it remains a marginal concern for most actors. Yet it represents an emergency without precedent and requires bold and creative thinking from the human rights community, and a radically more robust, detailed, and coordinated approach.

* The present report was submitted after the deadline in order to reflect recent developments.

Contents

		Page
I.	Introduction	3
II.	The Scale of the Challenge	3
III.	The impact on human rights, poverty, and inequality	4
	A. Human rights	4
	B. Poverty	5
	C. Inequality	6
IV.	The response of the human rights community	6
V.	Paths to transformation	9
	A. Understanding the failure to act	9
	B. The need for economic transformation	12
	C. Societal transformation	15
	D. Transforming the international human rights regime	16
VI.	Conclusion	21

I. Introduction[1]

1. There is no shortage of alarm bells ringing over climate change, but they seem to have remained largely unheard so far. In accepting the 2018 Nobel Prize for Economics, William Nordhaus described climate change as a 'Colossus that threatens our world' and the 'ultimate challenge for economics.'[2] The 2001 winner of the same prize, Joseph Stiglitz, referred to it more recently as World War III.[3] Pope Francis has declared a global 'climate emergency,' and warned that failure to take urgent action would be "a brutal act of injustice toward the poor and future generations."[4] Climate change threatens truly catastrophic consequences across much of the globe and the human rights of vast numbers of people will be among the casualties. By far the greatest burden will fall on those in poverty, but they will by no means be the only victims. To date, most human rights bodies have barely begun to grapple with what climate change portends for human rights. However, as a full-blown crisis bears down on the world, business as usual is a response that invites disaster.

2. This report focuses on the impact of climate change on human rights and especially the rights of people living in or near poverty; the response so far by the human rights community and its reluctance to engage robustly with climate change; and the necessary response to this existential challenge. It contends that genuinely transformative change is needed both in the ways societies and economies are currently structured and in the human rights regime.

II. The Scale of the Challenge

3. David Wallace-Wells began *The Uninhabitable Earth* by observing that global warming "is worse, much worse, than you think." Carbon is being added to the atmosphere 100 times faster than at any point in pre-industrial human history, and more damage has been done in the three decades since the United Nations established the Intergovernmental Panel on Climate Change (IPCC) in 1988 than in the whole of human history up until that time.[5]

4. The last five years have been the hottest in the modern record[6] and global carbon dioxide emissions began rising again in 2017 after three years of levelling off.[7] World energy consumption is projected to grow 28 percent between 2015 and 2040.[8] The consequences today are attested to by record temperatures, rapidly melting icecaps, unprecedented wildfires, frequent so-called "thousand year" floods, as well as devastating, more frequent hurricanes.[9] Millions face malnutrition due to devastating drought, and many more will have

[1] The Special Rapporteur is grateful for the superb research and analysis undertaken by Bassam Khawaja and Rebecca Riddell for this report.

[2] William Nordhaus, "Climate Change: The Ultimate Challenge for Economics," 109 *American Economic Review* (2019) 1991.

[3] Joseph Stiglitz, "The climate crisis is our third world war. It needs a bold response," *Guardian*, June 4, 2019, https://www.theguardian.com/commentisfree/2019/jun/04/climate-change-world-war-iii-green-new-deal.

[4] "Pope Francis declares 'climate emergency' and urges action," G*uardian*, June 14, 2019 https://www.theguardian.com/environment/2019/jun/14/pope-francis-declares-climate-emergency-and-urges-action.

[5] David Wallace-Wells, *The Uninhabitable Earth* (2019), p. 4.

[6] NASA, "2018 Fourth Warmest Year in Continued Warming Trend, According to NASA, NOAA," February 6, 2019, https://www.giss.nasa.gov/research/news/20190206/.

[7] UN Environment, "Emissions Gap Report 2018," https://www.unenvironment.org/resources/emissions-gap-report-2018 p. xiv.

[8] US Energy Information Administration, "EIA projects 28% increase in world energy use by 2040," September 14, 2017, https://www.eia.gov/todayinenergy/detail.php?id=32912.

[9] Jason Samenow, "It was 84 degrees near the Arctic Ocean this weekend as carbon dioxide hit its highest level in human history," *Washington Post*, May 14, 2019, https://www.washingtonpost.com/weather/2019/05/14/it-was-degrees-near-arctic-ocean-this-weekend-carbon-dioxide-hit-its-highest-level-human-history/.

to choose between starvation and migration.[10] Rising ocean temperatures are killing marine ecosystems that support food systems for hundreds of millions of people.[11] And climate change is threatening food production and posing dire economic and social threats.[12]

5. The most widespread scientific benchmark for measuring global warming is the rise in temperature relative to pre-industrial levels, already 1°C.[13] The 2015 Paris Agreement aims to ensure no higher than a 2°C rise by 2100 and endeavours to limit it to 1.5°C. But even those increases would be catastrophic for many people.[14]

6. A rise of only 1.5°C rather than 2°C could mean reducing the number of people vulnerable to climate-related risks by up to 457 million; 10 million fewer people exposed to the risk of sea level rise; reducing exposure to floods, droughts, and forest fires; limiting damage to ecosystems and reductions in food and livestock; cutting the number of people exposed to water scarcity by half; and up to 190 million fewer premature deaths over the century.[15]

7. However, the scale of change required to limit warming to 1.5°C is historically unprecedented and could only be achieved through "societal transformation" and ambitious emissions reduction measures.[16] And even 1.5°C of warming – an unrealistic, best-case scenario – will lead to extreme temperatures in many regions and leave disadvantaged populations with food insecurity, lost incomes and livelihoods, and worse health.[17] Five-hundred million people will be exposed and vulnerable to water stress, 36 million people could see lower crop yields, and up to 4.5 billion people could be exposed to heat waves.[18] In all of these scenarios, the worst affected are the least well-off members of society.

III. The impact on human rights, poverty, and inequality

A. Human rights

8. Climate change threatens the full enjoyment of a wide range of rights.[19] Rapid action and adaptation can mitigate much of this, but only if done in a way that protects people in poverty from the worst effects.[20]

9. According to the World Bank, at 2 °C degrees of warming, 100-400 million more people could be at risk of hunger and 1-2 billion more people may no longer have adequate water.[21] Climate change could result in global crop yield losses of 30 percent by 2080, even

[10] Oxfam, "How climate change is helping fuel a massive hunger crisis in East Africa," https://www.oxfam.org/en/grow-ethiopia-food-crisis-ethiopia/how-climate-change-helping-fuel-massive-hunger-crisis-east-africa.

[11] Lijing Cheng et al., "How fast are the oceans warming?," *Science*, January 11, 2019, http://science.sciencemag.org/content/363/6423/128.full.

[12] IPBES, "Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'," May 6, 2019 https://www.ipbes.net/news/Media-Release-Global-Assessment.

[13] IPCC, "Special Report: Global Warming of 1.5 ºC: Summary for Policymakers," 2018, https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/ p. 6.

[14] Carbon Brief, "The impacts of climate change at 1.5C, 2C and beyond," https://interactive.carbonbrief.org/impacts-climate-change-one-point-five-degrees-two-degrees/; *The Uninhabitable Earth*, p. 13.

[15] IPCC, "Special Report: Global Warming of 1.5 ºC," 2018, https://www.ipcc.ch/sr15/ pp. 447, 452, 464.

[16] Ibid, p. 448.

[17] Ibid, p. 447.

[18] Ibid, p. 453.

[19] Human Rights Council, "Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment," February 1, 2016, http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/31/52 p. 13.

[20] World Bank, "Shock Waves," 2016 https://openknowledge.worldbank.org/bitstream/handle/10986/22787/9781464806735.pdf p. 17.

[21] World Bank, "World Development Report 2010: Development and Climate Change," https://openknowledge.worldbank.org/handle/10986/4387 p. 5.

with adaptation measures.[22] Between 2030 and 2050, it is expected to cause approximately 250,000 additional deaths per year from malnutrition, malaria, diarrhea, and heat stress.[23] With people in poverty largely uninsured, climate change will exacerbate health shocks that already push 100 million into poverty every year.[24]

10. People in poverty face a very real threat of losing their homes.[25] By 2050, climate change could displace 140 million people in Sub-Saharan Africa, South Asia, and Latin America alone.[26] Flooding and landslides can weaken already degraded infrastructure and housing—especially for people living in unplanned or unserviced settlements.[27] 2017 saw 18.8 million people displaced due to disasters in 135 countries—almost twice the number displaced by conflict.[28] Since 2000, people in poor countries have died from disasters at rates seven times higher than in wealthy countries.[29] In addition, authorities have a history of prioritizing wealthier areas for protection, further endangering people in poverty.[30]

B. Poverty

11. Climate change will exacerbate existing poverty and inequality.[31] It will have the most severe impact in poor countries and regions, and the places poor people live and work. Developing countries will bear an estimated 75-80 percent of the costs of climate change.[32]

12. People in poverty tend to live in areas more susceptible to climate change and in housing that is less resistant; lose relatively more when affected; have fewer resources to mitigate the effects; and get less support from social safety nets or the financial system to prevent or recover from the impact. Their livelihoods and assets are more exposed[33] and they are more vulnerable to natural disasters that bring disease, crop failure, spikes in food prices, and death or disability.[34]

13. Climate change threatens to undo the last fifty years of progress in development, global health,[35] and poverty reduction.[36] Middle-class families, including in developed countries, are also being rendered poor.[37] The World Bank estimates that without immediate

[22] World Bank, "Shock Waves," p. 4, 6.

[23] WHO, "Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s," 2014, https://apps.who.int/iris/bitstream/handle/10665/134014/9789241507691_eng.pdf.

[24] World Bank, "Shock Waves," p. 9.

[25] General Assembly, "The right to adequate housing," August 6, 2019, https://documents-dds-ny.un.org/doc/UNDOC/GEN/N09/446/64/PDF/N0944664.pdf?OpenElement.

[26] World Bank, "Groundswell: Preparing for Internal Climate Migration," March 19, 2018, https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration

[27] *The Uninhabitable Earth*, p. 24.

[28] IDMC and NRC, "Global Report on Internal Displacement," 2018, http://www.internal-displacement.org/global-report/grid2018/downloads/2018-GRID.pdf pp. v, 2.

[29] CRED and UNISDR, "Economic loses, poverty & Disasters 1998-2017," https://www.unisdr.org/files/61119_credeconomiclosses.pdf p. 3.

[30] UN Environment and Sabin Center, "Climate Change and Human Rights," 2015, https://web.law.columbia.edu/sites/default/files/microsites/climate-change/climate_change_and_human_rights.pdf.

[31] IPCC, "Special Report" p. 451.

[32] World Bank, "World Development Report 2010: Development and Climate Change," p. xx.

[33] FAO, "The State of Food Security and Nutrition in the World," 2018, http://www.fao.org/3/I9553EN/i9553en.pdf p. xiv.

[34] World Bank, "Shock Waves," pp. 1-2, 4.

[35] Nick Watts et al., "Health and climate change: policy responses to protect public health," *Lancet*, November 7, 2015, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60854-6/fulltext.

[36] World Bank, "Shock Waves."

[37] Erin McCormick, "Claws out: crab fishermen sue 30 oil firms over climate change," *Guardian*, November 14, 2018, https://www.theguardian.com/environment/2018/nov/14/crab-fishermen-sue-oil-firms-exxon-chevron.

action, climate change could push 120 million more people into poverty by 2030—likely an underestimate, and rising in subsequent years.[38] Eight hundred million in South Asia alone live in climate hotspots and will see their living conditions decline sharply by 2050.[39]

C. Inequality

14. Perversely, the richest, who have the greatest capacity to adapt and are responsible for and have benefitted from the vast majority of greenhouse gas emissions, will be the best placed to cope with climate change, while the poorest, who have contributed the least to emissions and have the least capacity to react, will be the most harmed. The poorest half of the world's population—3.5 billion people—is responsible for just 10 percent of carbon emissions, while the richest 10 percent are responsible for a full half. A person in the wealthiest 1 percent uses 175 times more carbon than one in the bottom 10 percent.[40]

15. In addition to the economic benefits rich countries have already reaped from fossil fuels, one recent study found that climate change itself has already worsened global inequality and that the gap in per capita income between the richest and poorest countries is 25 percentage points larger than it would be without climate change.[41]

IV. The response of the human rights community

16. Although climate change has been on the human rights agenda for well over a decade, it remains a marginal concern. Despite a flurry of reports and statements, it is generally one on a long laundry list of 'issues.' Despite the extraordinarily short time period available in which to avoid catastrophic human rights consequences, it remains an optional add-on or niche issue, and most international rights organizations have not devoted urgent attention to it or to make it an integral part of their mainstream work.

Human Rights Council

17. The Council has adopted resolutions on climate change regularly since 2008, including those establishing and extending the special procedures mandate on human rights and environment. [42]

18. The most recent comprehensive example is resolution 38/4 (5 July 2018) on human rights and climate change, which also takes particular account of women's rights. Its operative provisions offer a good indication of the current state of the art. First, it acknowledges the "urgent importance of continuing to address … the adverse consequences of climate change." However, there is nothing to differentiate the urgency of action in this case from the comparable urgency noted regarding various other issues on the agenda. The Council gives no other indication that the matter is a true priority. Second, the resolution expresses particular concern for the negative impacts "particularly in developing countries and for the people whose situation is most vulnerable to climate change." While States are called upon to provide international cooperation and assistance to developing countries, the issue of differentiated responsibilities is entirely avoided, and people living in poverty are noticeably invisible, despite being the prime victims in practice.

19. More generally, the resolution proceeds as if the challenge is to manage the negative consequences of climate change for particular groups, rather than recognizing that the

[38] World Bank, "Shock Waves," p. 12.

[39] World Bank, "South Asia's Hotspots: Impacts of Temperature and Precipitation Changes on Living Standards," 2018, https://openknowledge.worldbank.org/handle/10986/28723.

[40] Oxfam, "World's richest 10% produce half of carbon emissions while poorest 3.5 billion account for just a tenth," December 2, 2015, https://www.oxfam.org/en/pressroom/pressreleases/2015-12-02/worlds-richest-10-produce-half-carbon-emissions-while-poorest-35.

[41] Noah Diffenbaugh and Marshall Burke, "Global warming has increased global economic inequality," *PNAS*, April 22, 2019, https://www.pnas.org/content/early/2019/04/16/1816020116.

[42] For a list of resolutions adopted, updated through 2016, see https://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/HRCAction.aspx.

enjoyment of all human rights by vast numbers of people is gravely threatened. Those threatened by climate change do not divide up neatly into categories such as developing/developed nations or men/women. A much broader framework is required. Finally, there is no recognition of the need for the deep social and economic transformation, which almost all observers agree is urgent if climate catastrophe is to be averted. The actions prescribed by the Council are entirely inadequate and reflect a deep denial of the real gravity of the situation.

OHCHR

Within the United Nations system, the Office of the High Commissioner for Human Rights has prepared reports on climate change in general,[43] on its relationship to the right to health,[44] to the rights of the child,[45] to migration,[46] and to the rights of women.[47] Expert meetings have been organized, the High Commissioner noted that States have "an obligation to strengthen their mitigation commitments in order to prevent the worst impacts of climate change,"[48] and the current Management Plan lists climate change as one of five 'frontier issues.' However, the bottom line is that climate change advocacy remains marginal to the major concerns of the Office.

20. Let it be observed that double standards are at play, the same is true of the previous work by the present Special Rapporteur.

Treaty bodies

21. The Committee on Economic, Social and Cultural Rights (CESCR) has produced the most extensive and focused response to date by a treaty body, affirming in 2018 that a State's "failure to prevent foreseeable human rights harm caused by climate change, or a failure to mobilize the maximum available resources in an effort to do so," could constitute a breach of its legal obligations.[49] In the same year, 42 percent of the Committee's Concluding Observations on States' reports addressed climate change.[50]

22. The Human Rights Committee's 2018 General Comment on the right to life broke important new ground by recognizing that "environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life."[51] The Committee called for sustainable resource use, substantive environmental standards, impact assessments, consultation with and notification of other States, access to information, and due regard to the precautionary approach. Perhaps most importantly, it called for measures by States to preserve and protect the environment, including in relation to "climate change caused by public and private actors."[52]

23. Treaty bodies have recommended that States set national targets for greenhouse gas emissions, intensify efforts to reach targets, transition to renewable energy, regulate private

[43] A/HRC/10/61 (15 January 2009).
[44] A/HRC/32/23 (6 May 2016).
[45] A/HRC/35/13 (4 May 2017).
[46] A/HRC/37/35 (14 November 2017); A/HRC/38/21 (23 April 2018).
[47] A/HRC/41/26 (5 June 2019).
[48] Michelle Bachelet, "Open Letter from the United Nations High Commissioner for Human Rights on integrating human rights in climate action," November 21, 2018, https://www.ohchr.org/Documents/Issues/ClimateChange/OpenLetterHC21Nov2018.pdf p. 2.
[49] Committee on Economic, Social, and Cultural Rights, "Climate change and the International Covenant on Economic, Social and Cultural Rights," October 8, 2018, https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=23691&LangID=E.
[50] CIEL and the GI-ESCR, "States' Human Rights Obligations in the Context of Climate Change: 2019 Update," https://www.ciel.org/wp-content/uploads/2019/03/HRTB-Feb.-2019-update-2019-03-25.pdf p. 20.
[51] Human Rights Committee, "General comment No. 36 (2018) on article 6 of the International Covenant on Civil and Political Rights, on the right to life," October 30, 2018, https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf para. 62.
[52] Ibid.

actors, mitigate the impact of natural disasters, and protect vulnerable populations. However, in-depth analysis of the three most engaged treaty bodies (CESCR, CRC and CEDAW) shows that just 9 percent of references to climate change since 2008 have dealt with mitigation, the issue of greatest importance for reversing the current trajectory. These bodies appear far more comfortable in addressing adaptation, impacts on particular groups, and procedural rights than confronting the core causes of climate change itself. And while the CESCR has pushed developing countries to seek assistance, treaty bodies have by and large not taken a role in determining the responsibility of wealthier countries to provide financial and technical assistance for climate action.[53]

Special procedures

24. A number of Special Rapporteurs have written on climate change, including about the impact on housing,[54] food,[55] internal displacement,[56] migration,[57] and indigenous peoples.[58] The Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment wrote in a landmark 2016 report that "States have obligations to adopt legal and institutional frameworks that protect against, and respond to, environmental harm that may or does interfere with the enjoyment of human rights."[59] In the near future, the Coordination Committee of Special Procedures should ensure a systemic response to climate change that considers the full range of options for coming up with a more creative, urgent, and system-wide approach, led by the Special Rapporteur on human rights and the environment.

Regional human rights bodies

25. At the regional level, the European Court of Human Rights has not directly addressed climate change.[60] In contrast, the Inter-American Court of Human Rights has characterized the human right to a healthy environment as fundamental for the existence of humankind, and having both individual and collective dimensions, including obligations owed to both present and future generations. It concluded that the rights to life and personal integrity, on their own, require States "to prevent significant environmental damages within and outside their territory" and that this, in turn, requires them to "regulate, supervise and monitor the activities under their jurisdiction that could cause significant damage to the environment; carry out environmental impact assessments …; prepare contingency plans …, and mitigate any significant environmental damage […]."[61]

Civil society

26. A diverse array of civil society groups and human rights defenders are working on climate change issues. However, among international human rights groups, there has been rather minimal engagement to date, and limited collaboration between human rights and

[53] CIEL and the GI-ESCR, "States' Human Rights Obligations in the Context of Climate Change: 2019 Update," pp. 9-10.

[54] General Assembly, "The right to adequate housing," August 6, 2009, https://daccess-ods.un.org/TMP/7340382.33757019.html.

[55] General Assembly, "Right to Food," August 5, 2015, https://www.ohchr.org/Documents/Issues/Food/A-70-287.pdf.

[56] General Assembly, "Protection of and assistance to internally displaced persons," August 9, 2011, https://documents-dds-ny.un.org/doc/UNDOC/GEN/N11/448/35/PDF/N1144835.pdf?OpenElement.

[57] General Assembly, "Human Rights of Migrants," August 13, 2012, https://documents-dds-ny.un.org/doc/UNDOC/GEN/N12/460/71/PDF/N1246071.pdf?OpenElement.

[58] Human Rights Council, "Report of the Special Rapporteur on the rights of indigenous peoples," November 1, 2017, https://documents-dds-ny.un.org/doc/UNDOC/GEN/G17/330/97/PDF/G1733097.pdf?OpenElement.

[59] Human Rights Council, "Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment."

[60] Heta Heiskanen, "Climate change and the European Court of Human Rights," *Routledge Handbook of Human Rights and Climate Governance*, 2018, p. 319.

[61] Inter-American Court of Human Rights, Environment and Human Rights, Advisory Opinion OC-23/17 Of November 15, 2017.

environmental groups remains a missed opportunity. A detailed survey is beyond the scope of this report, but the track records of major organizations are instructive.

27. Since 2009, Amnesty International has called for a global agreement to curb climate change and joined the Global Call to Climate Action.[62] Publicly available records indicate that in 2015, the organization's Senior Leadership Team "decided that although climate change was not … a priority in Amnesty's strategic goals for 2016-9, Amnesty would need to engage more deeply on the issue in the medium and long term."[63] By June 2017, a draft climate change policy had been prepared, but has yet to be adopted. In 2018, Amnesty called upon governments to "commit to much more ambitious emissions reduction targets …, or bear responsibility for loss of life and other human rights violations and abuses on an unprecedented scale."[64] More recent media reports indicate that Amnesty International plans to make climate change a key priority and to increase its advocacy on the subject.[65]

28. Human Rights Watch has worked on climate change within its broader program on the environment. While a number of reports have taken careful note of climate change-related dimensions of issues such as illegal logging, the right to food, child marriage, and the Zika virus, and one report directly documented the challenges of climate change,[66] little attention has been given to the overall impact of climate change on human rights, or to the obligation of governments to undertake mitigation. As a result, the voice of a key actor in international debates has been largely absent.

V. Paths to transformation

A. Understanding the failure to act

1. The failure of governmental leadership

29. Somber speeches by government officials at regular conferences are not leading to meaningful action. Thirty years of conventions appear to have done very little. From Toronto to Noordwijk to Rio to Kyoto to Paris, the language has been remarkably similar as States continue to kick the can down the road. The essential elements of climate change were understood in the 1970s, and scientists and advocates have been ringing alarm bells for decades. Yet States have marched past every scientific warning and threshold, and what was once considered catastrophic warming now seems like a best-case scenario.[67]

30. Even today, too many countries are taking short-sighted steps in the wrong direction. In Brazil, president Bolsonaro promised to open up the Amazon rainforest for mining, end demarcation of indigenous lands, and weaken environmental agencies and protections.[68]

[62] Amnesty International, "Climate Change," https://www.amnesty.org/en/what-we-do/climate-change/.

[63] Amnesty International, "Circular 10: Human rights aspects of climate change," https://www.amnestyusa.org/wp-content/uploads/2017/11/20170609ORG10630220172017ICMCircular10FinalICMClimate_ChangeEN.pdf p. 3.

[64] Amnesty International, "Failure to act swiftly on climate change risks human rights violation on massive scale," October 8, 2018, https://www.amnesty.org/en/latest/news/2018/10/failure-to-act-swiftly-on-climate-change-risks-human-rights-violation-on-massive-scale/.

[65] Sam O'Neill, 'Amnesty International expands remit to include climate change', *Sunday Times*, April 30, 2019, https://www.thetimes.co.uk/article/amnesty-international-expands-remit-to-include-climate-change-w9zs38mmn.

[66] Human Rights Watch, "There is No Time Left," 2015, https://www.hrw.org/sites/default/files/report_pdf/kenya1015_web.pdf.

[67] Nathaniel Rich, "Losing Earth," *New York Times Magazine*, August 1, 2018, https://www.nytimes.com/interactive/2018/08/01/magazine/climate-change-losing-earth.html.

[68] Dom Philips, "Jair Bolsonaro launches assault on Amazon rainforest protections," *Guardian*, January 2, 2019, https://www.theguardian.com/world/2019/jan/02/brazil-jair-bolsonaro-amazon-rainforest-protections.

China is moving to end reliance on coal, but exporting coal-fired power plants abroad[69] and failing to implement its regulations for methane emissions at home.[70] In the United States, until recently the world's biggest producer of global emissions, President Trump has placed former lobbyists in oversight roles,[71] adopted industry talking points,[72] presided over an aggressive rollback of environmental regulations,[73] and is actively silencing and obfuscating climate science.[74]

31. The 2015 Paris Agreement represents the most promising step in addressing climate change to date. Yet the commitments States have adopted in pursuit of the Agreement are woefully insufficient, and would lead to a devastating 3 °C of warming by 2100.[75] Efforts would need to be tripled just to limit global warming to 2 °C, and increased fivefold to hold warming at 1.5 °C. Time is running out to limit global warming to either threshold and States are failing to meet even their current inadequate commitments.[76]

2. Failure on the part of corporate actors

32. Some look with hope to the private sector for innovations or strategically engage with corporations in light of decades of inaction by States. However, the track record of the fossil fuel industry makes clear that overreliance on profit-driven actors would almost guarantee massive human rights violations, with the wealthy catered to and the poorest left behind. And if climate change is used to justify business-friendly policies and widespread privatization, exploitation of natural resources and global warming may be accelerated rather than prevented.

33. Fossil fuel companies are the main driver of climate change: in 2015, the fossil fuel industry and its products accounted for 91 percent of global industrial greenhouse emissions and 70 percent of all human-made emissions.[77] The industry has known for decades about their responsibility for rising CO2 levels and the likelihood that the rise would lead to catastrophic climate change.[78] From 1979 to 1983, the American Petroleum Institute (API) ran a task force originally titled the "CO2 and Climate Task Force." In one 1980 meeting, it reviewed a report describing "strong empirical evidence" that a rise in CO2 was caused "mainly from fossil fuel burning." The report cautioned that a 3 percent annual growth rate

[69] Michael Lelyveld, "China Pushes Coal-Fired Power Plants Abroad," *Radio Free Asia*, June 24, 2017, https://www.rfa.org/english/commentaries/energy_watch/china-pushes-coal-fired-power-plants-abroad-07242017102219.html.

[70] Scott Miller et al., "China's coal mine methane regulations have not curbed growing emissions," *Nature*, January 29, 2019, https://www.nature.com/articles/s41467-018-07891-7.

[71] Lisa Friedman, "Trump Says He'll Nominate Andrew Wheeler to Head the E.P.A.," *New York Times*, November 16, 2018, https://www.nytimes.com/2018/11/16/climate/trump-andrew-wheeler-epa.html.

[72] Environmental Data and Governance Initiative, "Changes to EPA's 'Natural Gas Extraction – Hydraulic Fracturing' Webpage," November 14, 2018, https://envirodatagov.org/changes-to-epas-natural-gas-extraction-hydraulic-fracturing-webpage/.

[73] Nadja Popovich et al., "78 Environmental Rules on the Way Out Under Trump," *New York Times*, December 28, 2018, https://www.nytimes.com/interactive/2017/10/05/climate/trump-environment-rules-reversed.html.

[74] Sabin Center and Climate Science Legal Defense Fund, "Silencing Science Tracker," http://columbiaclimatelaw.com/resources/silencing-science-tracker/.

[75] IPCC, "Special Report Summary" p. 18.

[76] UN Environment, "Emissions Gap Report 2018," pp. xiv, xv.

[77] CDP, "The Carbon Majors Database CDP Carbon Majors Report," 2017, https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1499691240 p. 7.

[78] See, eg., Naomi Klein, *This Changes Everything: Capitalism vs. the Climate*, 2014, pp. 31-64; Inside Climate News, "Exxon: the Road Not Taken," 2015, https://insideclimatenews.org/content/Exxon-The-Road-Not-Taken; Business and Human Rights Resource Centre, "Turning up the heat: Corporate legal accountability for climate change," 2018, https://www.business-humanrights.org/en/turning-up-the-heat-corporate-legal-accountability-for-climate-change.

of CO2 could lead to a 2.5 °C increase that would bring "world economic growth to a halt in about 2025," and a "likely" 5 °C rise by 2067, with "globally catastrophic effects."[79]

34. However, the industry took no action to change its business model. From 1988 to 2015, fossil fuel companies doubled their contribution to global warming, producing in 28 years the equivalent of their emissions in the prior 237 years since the Industrial Revolution.[80] During that time, just 100 companies produced 71 percent of global greenhouse gas emissions.[81]

35. Fossil fuel companies also embarked on an ambitious campaign to prevent meaningful change and thwart the imposition of binding emissions commitments. When the Kyoto Protocol was open for signature in the 1990s, API worked to ensure that the US did not ratify the treaty, arguing in correspondence to the White House that it "would be extremely harmful to the U.S. economy."[82] API also took the lead on what it called a "Global Climate Science Communications Plan," to convince the public of significant uncertainties in climate science, defeat the Kyoto protocol, and put an end to further initiatives.[83]According to one count, the fossil fuel industry spent $370 million lobbying on US climate change legislation from 2000 to 2016,[84] and even more funding think thanks, research institutions, and industry scientists. Within the US, this was depressingly effective: the Kyoto Protocol was never ratified, public understanding about climate change dropped precipitously, and the current President has referred to climate change as a "hoax" created to hurt domestic manufacturing.

3. Governmental complicity with corporate emissions

36. Even today, States subsidize the fossil fuel industry to the tune of $5.2 trillion per year, or 6.3 percent of global GDP.[85] Another trillion goes to support natural resource overexploitation.[86] Efficient fossil fuel pricing in 2015 would have reduced global carbon emissions by 28 percent.[87]

37. The failures of States to protect people from climate change in the 1990s and 2000s stand in stark contrast to their willingness to extend extraordinary protections to investors through the conclusion of a dizzying number of international trade and investment treaties during the same period—ignoring apparent contradictions such as how the travel of goods would affect emissions. The trade and climate regimes advanced simultaneously, but with a vast difference in the weight and enforceability of commitments. For example, while the US has never made a binding commitment to reduce carbon emissions, it concluded a plethora of binding international agreements that provide investors with substantive rights and the ability to haul the US into secretive international arbitration. Globally, policymakers have accepted the need for such treaties but have failed to honour them.[88]

[79] API, meeting minutes, Feb. 29, 1980, www.climatefiles.com/climate-change-evidence/1980-api-climate-task-force-co2-problem/ pp. 9-10, 12, 16.

[80] CDP, "The Carbon Majors Database," 2017, p. 2.

[81] CDP, "The Carbon Majors Database," 2017, p. 8.

[82] Letter from William F. O'Keefe to Laura D'Andrea Tyson, March 20, 1996, www.climatefiles.com/trade-group/american-petroleum-institute/1996-api-white-house-greenhouse/ pp. 2-3

[83] John Cushman Jr., "Industrial Group Plans to Battle Climate Treaty," *New York Times*, April 26, 1998, https://www.nytimes.com/1998/04/26/us/industrial-group-plans-to-battle-climate-treaty.html,

[84] Yale Environment 360, "Fossil Fuel Interests Have Outspent Environmental Advocates 10:1 on Climate Lobbying," July 19, 2018, https://e360.yale.edu/digest/fossil-fuel-interests-have-outspent-environmental-advocates-101-on-climate-lobbying.

[85] IMF, "Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates," 2019, https://t.co/2n6IgtrD6l.

[86] UN Environment et al., "Green Industrial Policy," 2017, http://wedocs.unep.org/bitstream/handle/20.500.11822/22277/Green_industrial_policy.pdf p. 29.

[87] IMF, "Global Fossil Fuel Subsidies Remain Large."

[88] Klein, *This Changes Everything*, p. 76.

B. The need for economic transformation

38. States, politicians, and corporations have consistently used bad economic arguments to stall climate action. Various governments have argued that it would alter markets, threaten economic growth, harm citizens' way of life, and kill jobs. This is a cynical and short-sighted approach.

39. The vast majority of economic growth, development, and poverty reduction since the industrial revolution has depended on exploitation of natural resources, despite the social and environmental costs. Fossil fuels have driven access to energy, transportation, and quality of life improvements. Jobs in many sectors rely on extraction and emissions.[89] Developing countries watched as wealthier countries grew rich by burning an irresponsible amount of fossil fuels. But that growth is already under threat from the disastrous implications of climate change, dwindling natural resources, changing ecosystems, and environmental hazards.[90] Maintaining the current course will not result in continued growth, but is a recipe for long-term economic catastrophe.

40. On its current track, climate change will decimate the global economy.[91] According to the IPCC, at 2 °C of warming, the world would experience socioeconomic losses amounting to 13 percent of global GDP and $69 trillion of damage.[92] Accounting only for the rise in temperature, and not the associated extreme weather events, one study found that unmitigated warming is expected to reduce average global incomes roughly 23 percent by 2100 and widen income inequality.[93] In the United States alone, there have been 241 weather and climate disasters since 1980 that have each exceeded $1 billion in damage costs, with a cumulative cost of $1.6 trillion.[94]

41. According to the ILO, 1.2 billion jobs—40 percent of global employment—rely on a sustainable and healthy environment. In what many regard as the best-case scenario (1.5 °C of warming by 2100), heat stress will reduce global working hours 2 percent by 2030 alone—the equivalent of 72 million full-time jobs, and most likely this is an underestimate. Pollution and environmental degradation will affect workers' productivity, health, income, and food security.[95]

42. Addressing climate change will require a fundamental shift in the global economy and how States have historically sought prosperity,[96] decoupling improvements in economic well-being and poverty reduction from resource depletion, fossil fuel emissions, and waste production. This will entail radical and systemic changes including incentives, pricing, regulation, and resource allocation, in order to disrupt unsustainable approaches and reflect environmental costs in entire economic subsystems including energy, agriculture, manufacturing, construction, and transportation.[97]

43. Economic prosperity, decent work, and environmental sustainability are fully compatible. Studies have found it is possible to rely on wind, water, and solar for all new energy projects by 2030 and transition the entire energy system to renewable energy by 2050—with current technology and at similar costs as fossil fuels.[98] Fiscal policy and carbon

[89] UN Environment et al., "Green Industrial Policy."

[90] ILO, "Greening with Jobs," https://www.ilo.org/weso-greening/ pp. 9, 17.

[91] Ibid. pp. 2, 7, 27.

[92] IPCC, "Special Report", pp. 264, 453. *See also,* Marshall Burke at al., "Large potential reduction in economic damages under UN mitigation targets," *Nature,* May 23, 2018, https://www.nature.com/articles/s41586-018-0071-9.pdf.

[93] Marshall Burke et al., "Global non-linear effect of temperature on economic production," *Nature,* November 12, 2015, https://www.nature.com/articles/nature15725.

[94] NOAA, "2018's Billion Dollar Disasters in Context," February 7, 2019, https://www.climate.gov/news-features/blogs/beyond-data/2018s-billion-dollar-disasters-context.

[95] ILO, "Greening with Jobs," pp. 2, 7, 27.

[96] Ibid.

[97] UN Environment et al., "Green Industrial Policy."

[98] Mark Jacobson and Mark Delucchi, "Providing all global energy with wind, water, and solar power, Part I: Technologies, energy resources, quantities and areas of infrastructure, and materials," *Energy Policy,* December 30, 2010, web.stanford.edu/group/efmh/jacobson/Articles/I/JDEnPolicyPt1.pdf;

pricing can incentivize low carbon investment and emissions mitigation, generate revenue to bolster social protection and support people in poverty, and incentivize the creation of good green jobs.[99]

44. The World Bank sees no reason that a low-carbon path must slow economic growth.[100] There is strong evidence that reducing emissions will mitigate the economic harm of climate change by trillions of dollars.[101] Renewable energy will create jobs while energy-efficient investments can lead to greater energy savings and fewer emissions. Climate adaption and a sustainable economy would also reduce the costs of healthcare and environmental degradation, restore overused and exhausted resources, increase food and water security, and reduce poverty and inequality.[102] Studies have shown that the benefits of reducing pollution on health and agriculture alone could make up for the cost of mitigation, at least until 2030.[103]

45. Twenty-three countries have already decoupled economic growth from emissions through the use of renewable energy, carbon pricing, and green subsidies and jobs, meaning their economies are growing faster than their emissions or resource use. On average, they have done so while reducing poverty faster than other countries.[104] The barriers are social and political, not technological or economic.

The Private Sector

46. The response to global warming requires transformational change, and while some see a chance to address inequalities and fulfil basic rights, others seem to see an opportunity for long-sought, investor-friendly reforms. The World Bank and UNDP have jointly begun an initiative, "Invest4Climate," to "identify policy and regulatory barriers to scaled up investment and develop solutions and political support to address them."[105] An OECD publication, "Investing in Climate, Investing in Growth," calls for policies for "resilient investment" that are difficult to distinguish from the recommendations such institutions have been issuing for years and that have gotten us to this point: governments must ensure that the economy is "open to competitive investment," ensure labour markets are "flexible," embrace "[c]ore investment principles such as not discriminating against foreign investors," and eliminate tariffs and local-content obligations.[106]

47. There is little doubt that companies will play a role in providing and implementing solutions to climate change, but an overreliance on voluntary, private sector efforts would be a mistake. Climate change is a market failure, and voluntary emissions reduction commitments will only go so far. As of May 2019, 554 companies had committed to reductions in greenhouse gas emissions as a part of the "Science Based Target initiative,"[107] but, the initiative is essentially toothless and relies entirely on self-reporting.[108]

48. Massive amounts of money will likely be funneled to and through the private sector—including by international financial institutions and climate finance mechanisms—risking corporate giveaways or the sell-off of public goods. Corporate-friendly efforts to address emissions have created "perverse incentives" and rewarded manufacturers for producing

Energy Watch, "100% Renewable Electricity Worldwide is Feasible and More Cost-Effective than the Existing System," November 8, 2017, http://energywatchgroup.org/new-study-100-renewable-electricity-worldwide-feasible-cost-effective-existing-system.

[99] UN Environment, "Emissions Gap Report 2018," pp. xxi-xxii.

[100] World Bank, "World Development Report 2010: Development and Climate Change," p. 7.

[101] Burke at al., "Large potential reduction in economic damages under UN mitigation targets."

[102] UN Environment et al., "Green Industrial Policy," pp. 26, 27, 31; IPCC, "Special Report Summary" p. 21.

[103] World Bank, "Shock Waves," p. 23.

[104] ILO, "Greening with Jobs," pp. 7, 13, 15.

[105] World Bank, "About Invest4Climate," 2019, www.worldbank.org/en/topic/climatechange/brief/mobilizing-finance-for-climate-action-through-the-invest4climate-platform.

[106] OECD, "Investing in Climate, Investing in Growth," 2017, https://read.oecd-ilibrary.org/economics/investing-in-climate-investing-in-growth_9789264273528-en#page1 pp. 185, 187-88, 209, 215-16.

greenhouse gases to, in turn, get paid to destroy them, or inspired "grifters and hustlers" to seek out communities in biologically rich countries to secure land rights with promises of carbon credit revenue.[109]

49. Climate change-related privatization also poses risks to the rights of people in poverty. In its "Climate Implementation Plan," the International Finance Corporation (IFC) aims to "scale climate investments" to 28 percent of its financing by 2020 and "catalyze" $13 billion in private sector capital annually, including through public-private partnerships.[110] Between 2012 and 2016, the IFC closed 21 climate-related public-private partnership transactions, mobilizing $2.9 billion.[111] The IFC identifies public-private partnerships as a form of "climate-smart urban water infrastructure," and claims the private sector "will help ensure sustainable access to water services."[112] The assumption that privatization will promote access to water in a time of growing water scarcity is profoundly troubling, given that privatization inevitably prioritizes profit and sidelines considerations such as equality and non-discrimination, marginalizing poor people and communities.[113]

50. Rather than helping the world adapt to climate change, privatizing basic services and social protection may be a form of maladaptation. When hurricane Sandy wreaked havoc in New York in 2012, stranding low-income and vulnerable New Yorkers without access to power and healthcare, the Goldman Sachs headquarters was protected by tens of thousands of its own sandbags and power from its generator.[114] Private white-glove firefighters have been dispatched to save the mansions of high-end insurance customers from wildfires.[115] ``An over-reliance on the private sector could lead to a climate apartheid scenario in which the wealthy pay to escape overheating, hunger, and conflict, while the rest of the world is left to suffer.

Climate Finance

51. Hundreds of billions of dollars or more will need to be mobilized to avert human suffering and losses in the trillions. The commitment by developed countries to mobilize $100 billion a year by 2020 is "only a fraction of the finance needed to keep the average temperature increase to 2 °C."[116] It is also insufficient for adaptation needs—which in developing countries are expected to total between $140 and 300 billion annually by 2025/30,[117] and between $280 and $500 billion a year by 2050.[118] According to one analysis of existing figures, estimated assistance is lower than reported, grant-based assistance lags far behind loans, and only a small fraction goes to least developed countries.[119]

[109] Klein, *This Changes Everything*, p. 219-20.

[110] IFC, "IFC Climate Implementation Plan," 2016, https://www.ifc.org/wps/wcm/connect/5f5402804c60b510b6bbbeaccf53f33d/IFC_Climate_Implementation_Plan_03152016_WBG_v2.pdf?MOD=AJPERES p. 1.

[111] IFC, "IFC Climate Implementation Plan," p. 23.

[112] IFC, "Creating Markets for Climate Business," 2017, https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/climate+business/resources/creating+markets+for+climate+business+report p. 94.

[113] General Assembly, "Report of the Special Rapporteur on extreme poverty and human rights," 2018, https://undocs.org/A/73/396.

[114] Jessica Pressler, "Goldman Has the Power," *New York Magazine*, Nov. 3, 2012, nymag.com/intelligencer/2012/11/goldman-has-the-power.html.

[115] Klein, *This Changes Everything*, p. 52.

[116] World Resource Institute, "Getting to $100 billion: climate finance scenarios and projections to 2020," 2015, https://www.wri.org/publication/getting-100-billion-climate-finance-scenarios-and-projections-2020 p. 5.

[117] Oxfam, "Climate Finance Shadow Report 2018," 2018, https://www.oxfam.org/en/research/climate-finance-shadow-report-2018 p. 6.

[118] UNEP, "Cost of Adapting to Climate Change Could Hit $500 Billion per year by 2050," May 10, 2016, https://www.un.org/sustainabledevelopment/blog/2016/05/unep-report-cost-of-adapting-to-climate-change-could-hit-500b-per-year-by-2050/

[119] Oxfam, "Climate Finance Shadow Report 2018," p. 3.

52. Mitigation and adaptation projects that are supported by climate funds also have the potential to undermine a range of procedural and substantive human rights.[120] Climate finance can exacerbate gender inequality if funders are not attuned to the gendered impacts of climate change and systematic discrimination that women face.[121] Experts have called for the safeguards of the various climate funds and mechanisms to be "made uniform and revised to fully account for human rights considerations."[122]

C. Societal transformation

53. Much of post-industrial poverty reduction and economic growth has been based on unsustainable resource extraction and exploitation. Certain people and countries have gotten incredibly wealthy through emissions without paying for the costs to the environment and human health—costs borne disproportionately by people in poverty. Staying the course will not preserve growth in the long term, but will be disastrous for the global economy and pull hundreds of millions into poverty. Climate action should not be viewed as an impediment to economic growth but as an impetus for decoupling economic growth from emissions and resource extraction, and a catalyst for a green economic transition, labour rights improvements, and poverty elimination efforts.

54. Climate change will require deep structural changes in the world economy. It is imperative this is done in a way that provides necessary support, protects workers, creates good jobs, and is guided by international labour standards. A robust social safety net and a well-managed transition to a green economy will be the best response to the unavoidable harms that climate change will bring.[123]

55. Climate change should be a catalyst for States to fulfill long ignored and overlooked economic and social rights, including to social security, water and sanitation, education, food, healthcare, housing, and decent work. Revenue from climate action including emissions control and tax restructuring should be used to fund social protection programs to protect those affected.

56. Taking the necessary action to address climate change will likely lead to job losses in certain carbon-intensive sectors. However, according to the ILO, these will be more than offset by new jobs required to limit global warming to 2 °C. Transitioning to clean energy alone will create an estimated net increase of 18 million jobs through renewable energy, growth in electric vehicles, and increases in buildings' energy efficiency. Shifting from an economy predicated on consumption to a circular economy underpinned by reuse, recycling, and remanufacturing is projected to create another six million jobs. And a shift to sustainable agriculture presents additional job opportunities.[124]

57. This transition will require robust policies at the local level to support displaced workers, facilitate their transition, and ensure that new jobs are quality ones. These include cash transfers, unemployment protection, placement support, and relocation grants.[125] Unavoidable changes to the economy and workforce make a strong case for universal job

[120] Tessa Khan, Promoting rights-based climate finance for people and planet," April 18, 2018, https://www.ohchr.org/Documents/Issues/Development/Session19/A_HRC_WG.2_19_CRP.4.pdf.

[121] OHCHR, "Analytical study on gender-responsive climate action for the full and effective enjoyment of the rights of women," May 1, 2019, https://www.ohchr.org/Documents/Issues/ClimateChange/GenderResponsive/A_HRC_41_26.pdf p. 14.

[122] Human Rights Council, "Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment," para. 61.

[123] IPCC, "Special Report" p. 464.

[124] ILO, "Greening with Jobs," p. 1.

[125] ILO, "Guidelines for a just transition towards environmentally sustainable economies and societies for all," 2015, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf p. 5.

guarantee programs that provide rights-based work creating the assets, services, and infrastructure for a green transition and disaster mitigation in exchange for a stable income.[126]

58. If the transition from to a sustainable economy is well managed, it could create new and better jobs, move workers into the formal sector, provide education and training, reduce poverty, protect economic well-being, and address discrimination and inequality.[127] There is also an opportunity for developing countries to skip fossil fuel-driven growth and leapfrog into decentralized, renewable energy and more efficient agriculture and construction technologies. But if managed poorly, it will mean job losses, disastrous impacts for poor people, entrenched labour discrimination, and a breakdown of social and labour protections.[128]

59. Governments, and too many in the human rights community, have failed to seriously address climate change for decades. The size, scope, and brutality of the problem make it difficult to envision. Corporations have obscured the facts and opposed intervention in pursuit of short-term profits.[129] The worst outcomes are too far away to draw our focus, and those in power are unable to look past the next election. We have reached a point where the best-case outcome is widespread death and suffering by the end of this century, and the worst-case puts humanity on the brink of extinction.[130]

60. Yet there have been some positive developments. Forty-nine countries have already seen their emissions begin to decline. More than 7,000 cities, 245 regions, and 6,000 companies have committed to climate mitigation. Coal is no longer competitive, and renewable energy is quickly becoming cheaper.[131] The Urgenda case was the first in the world in which citizens established that their government has a legal duty to prevent climate change.[132] In Australia, a court rejected an appeal seeking permission to develop a new coal mine, in part because the mine would contribute to global warming.[133] US legislators have introduced proposals for a Green New Deal to achieve net-zero emissions and while investing in green jobs and infrastructure.[134] Sixteen-year-old climate activist Greta Thunberg has spurred an international movement of climate strikes.[135] In addition, "Extinction Rebellion" protests took over the United Kingdom this year causing Wales, Scotland, and the UK parliament to declare climate emergencies.[136]

D. Transforming the international human rights regime

61. An extraordinary challenge demands an extraordinary response. It cannot be dealt with solely through traditional approaches. Climate change is an emergency without precedent and requires bold and creative thinking from the human rights community. But that group is notoriously averse to innovation and assumes that the next major challenge, no matter how different or dramatic, can be dealt with on the basis of established means.

[126] ILO, "Greening with jobs," p. 110-111.
[127] ILO, "Guidelines for a just transition," p. 4.
[128] UN Environment et al., "Green Industrial Policy."
[129] Business and Human Rights Resource Centre, "Turning up the heat."
[130] *The Uninhabitable Earth*, p. 29.
[131] UN Environment, "Emissions Gap Report 2018," p. xx.
[132] Urgenda, "Climate Case," https://www.urgenda.nl/en/themas/climate-case/.
[133] Human Rights Watch, "Australia Court Rules it is the 'Wrong Time' for Coal," February 10, 2019, https://www.hrw.org/news/2019/02/10/australia-court-rules-it-wrong-time-coal; *Gloucester Resources Limited v. Minister for Planning* [2019] NSWLEC 7.
[134] "H.Res.109 - Recognizing the duty of the Federal Government to create a Green New Deal." https://www.congress.gov/bill/116th-congress/house-resolution/109/text.
[135] "Swedish student Greta's climate 'school strike' goes global," *Reuters*, March 11, 2019, https://www.reuters.com/article/us-climate-change-youth-greta-idUSKBN1QS1O0.
[136] "'Climate emergency' declared by Welsh Government," *BBC*, April 29, 2019, https://www.bbc.com/news/uk-wales-politics-48093720.

1. Acknowledge the urgency of transformational change

62. The first steps in overcoming inertia is to acknowledge not just that transformational action is urgent, but that human rights can and must be part of the solution. The delusion that climate change is really a technical issue, or solely a political matter, and that human rights law has only a minor role to play must be abandoned.

63. If a threat that is likely to challenge or undermine the enjoyment of almost every human right in the international bill of rights does not bring concerted action by human rights proponents, they will have rendered themselves marginal or irrelevant to humanity's most pressing short, medium, and long-term challenge.

64. While some activists, lawyers, affected communities, and occasionally governments, have undertaken promising, creative, and urgently needed strategies for bringing human rights to bear on climate change, the dominant response has been one of immense caution, if not abdication. The community as a whole, as well as each of its component parts, needs to step up and engage determinedly and creatively with climate change.

2. Acknowledge the threats to democracy and civil and political rights

65. Consideration of the likely risks that will flow from climate change invariably focuses primarily if not exclusively on rights to life, water and sanitation, health, food, and housing. Yet democracy and the rule of law, as well as a wide range of civil and political rights are every bit at risk.[137] Many commentators have insisted that climate change should be considered an emergency, and that governments and others should act accordingly.[138] While this might not be intended to suggest the formal declaration of a state of emergency that would justify limitations on human rights, States may very well respond to climate change by augmenting government powers and circumscribing some rights. This will be a very fraught process and require great vigilance on the part of governments, human rights institutions, and national and regional courts.

66. Additionally, the uncertainty and insecurity in which many populations will be living, combined with large-scale movements of people both internally and across borders, will pose immense and unprecedented challenges to governance.[139] The risk of community discontent, of growing inequality, and of even greater levels of deprivation among some groups, will likely stimulate nationalist, xenophobic, racist and other responses. Maintaining a balanced approach to civil and political rights, whether in a society that is determinedly seeking to mitigate climate change or one that is in denial, will be extremely complex.

3. Revitalize economic and social rights

67. As people's access to food, land, water, health care, housing, and education are threatened or destroyed, there will be an ever-greater need for principled policies that ensure respect for economic and social rights. The sorts of transformational policies called for, with the concomitant need for a more equal distribution of resources and the satisfaction of essential needs, will also demand much more systematic engagement with these rights than most governments or human rights groups have so far considered. Coping with the unavoidably dramatic impacts of climate change will be much harder if people's economic and social rights are not protected. This applies doubly in the case of those living in poverty whose plight is almost certain to be greatly exacerbated. There is a strong case for advance planning and strategizing around these challenges, but very little evidence that it is being undertaken.

4. Take regulatory responsibility

68. The dominant neoliberal economic orthodoxy, reflected in the push supported by international organizations including the United Nations, the World Bank, and the International Monetary Fund favouring privatization, deregulation, and austerity in the form

[137] Amnesty International, "Climate Change," https://www.amnesty.org/en/what-we-do/climate-change/.

[138] Spratt and Dunlop, p. 39.

[139] Ayşem Mert, "Democracy in the Anthropocene: A New Scale," in *Anthropocene Encounters: New Directions in Green Political Thinking*, 2019, p. 128.

of fiscal consolidation means that governmental regulation is very much out of vogue. Yet it is clear that corporate actors cannot and will not, of their own accord, be capable of promoting a comprehensive approach that ensures the sort of economic and social transformation that climate change mitigation demands. Through the actions of the fossil-fuel industry in particular, and highly successful corporate lobbying to downplay or ignore climate change in many countries, the private sector has demonstrated its inability to take any sort of leadership role in climate change mitigation. This is true even though companies and major investment funds are now acutely aware of the upheavals on the horizon.[140] The result is that governments, individually and collectively, need to take responsibility for implementing a comprehensive transformative program aimed at mitigation. The human rights community needs to push strongly for governments to move rapidly in this direction.

5. Rethinking human rights responses

(i) Transcending traditional techniques

69. The international human rights field is dominated by lawyers, who tend to channel their energy into a handful of tried and tested approaches. These include litigation; drafting reports; submitting complaints; advocacy before government agencies, tribunals or treaty bodies; and issuing press releases.

70. They also seek to develop jurisprudence defining the scope and implications of particular rights. Some progress has already been made in clarifying States' human rights obligations in the context of climate change. An array of courts and other bodies have asserted that climate change poses serious threats to human rights, that States must abide by human rights law in addressing climate change, that they must anticipate and address foreseeable harms that climate change will bring, and that they must strengthen their mitigation commitments. However, much more needs to be done to fill in significant gaps and uncertainties about States' obligations.

71. With regard to emissions, human rights actors have set broad standards, such as a requirement to "reduce emissions as rapidly as possible, applying the maximum available resources."[141] This is an important initial step, but greater clarity is required as to what it means in practice. It does not give States and other actors clear guidance, allowing them to get away with vague commitments and tepid action. Human rights actors must be willing to translate States' obligations in a way that more clearly engages with policymaking choices, or will lose relevance to this debate.

72. Litigation is important, and more than 850 climate change cases have been filed in 24 countries.[142] The bulk of these seek to hold governments and companies accountable for emissions, and pursue remedies for harms caused by their failure to reduce emissions they knew would be harmful. There is a recent and important uptick in cases brought to hold actors accountable for failures to adapt to foreseeable effects of climate change.[143] These cases put States on further notice that they must take into account loss of livelihoods, displacements, food insecurity, and other effects of climate change. But litigation is only one small part of an overall strategy.

[140] Georgi Kantchev and Sarah Kent, "Funds Say Climate Change Is Now Part of Their Investing Equation," *Wall Street Journal*, June 11, 2019, https://www.wsj.com/articles/funds-say-climate-change-is-now-part-of-their-investing-equation-11560218940; CDB "Major Risk or Rosy Opportunity: Are Companies Ready for Climate Change," 2019, https://www.cdp.net/en/research/global-reports/global-climate-change-report-2018/climate-report-risks-and-opportunities.

[141] Mandate of the Special Rapporteur on human rights and the environment, "Statement on the human rights obligations related to climate change, with a particular focus on the right to life," October 25, 2018, https://www.ohchr.org/Documents/Issues/Environment/FriendsIrishEnvironment25Oct2018.pdf.

[142] UN Environment, "The Status of Climate Change Litigation: A Global Review," 2017, p. 10.

[143] Ibid, pp. 16, 23.

(ii) Community activism

73. Much human rights activity is bureaucratized and sanitized, satisfying itself with formal procedural outcomes that might have little direct real-world impact. The roots of human rights and the real driving force for progress can only come from community mobilization. Governments overwhelmingly stand for the status quo and are thus unlikely to take a strong lead when radical change is needed. Much of the human rights community retains strong grassroots links and is well placed to encourage and facilitate community mobilization. Without it, the natural complacency of governmental elites and vested interests of financial elites will continue sleep-walking towards catastrophe.

(iii Building coalitions

74. Human rights actors need a more robust, detailed, and coordinated inter-disciplinary approach that brings together law, climate science, labour rights, and economics to tackle issues around emissions, mitigation, social protection, and just transition head-on, and provide a path forward that States can follow. Major human rights actors must tackle questions about emissions, resource allocation, and energy and economic policy that States are grappling with and where there is a real need for detailed, actionable recommendations. Human rights treaty bodies and other mechanisms have a role in setting standards for these decisions that are informed by human rights law. Failing to do so while sticking to broad truisms that are difficult to act on will leave the human rights community sidelined on critical climate change decisions.

75. There are positive developments in coordination between environmental advocates and human rights actors, including by bringing climate concerns into the UN treaty body system and the use of human rights in climate litigation. But there is a real opportunity to leverage the technical expertise of environmental and climate scientists to bring detail and precision into human rights recommendations and legal standards, which have so far largely lacked the specificity that would facilitate meaningful government incorporation.

(iv) Human rights-compliant solutions

76. The Paris Agreement is the first climate change agreement to explicitly recognize the relevance of human rights. It calls on State parties to respect, promote, and consider their respective obligations on human rights when taking action to address climate change. But the Katowice "rulebook," developed to guide implementation of the Agreement, omitted any reference to human rights.[144] Despite the growing attention from the human rights community, States are giving only marginal attention to human rights in the conversation on climate change.

77. The human rights community could play an important role clarifying the legal requirements around climate action, facilitating the participation of affected communities, ensuring that strategies employed for attaining targets and adapting to climate change comply with human rights law, and advocating for their implementation and enforcement through both litigation and traditional human rights advocacy.

78. It is crucial that climate action is pursued in a way that respects human rights, protects people in poverty from negative impacts, and prevents more people from falling into poverty. This would include ensuring that vulnerable populations have access to protective infrastructure, technical and financial support, relocation options, training and employment support, land tenure, and access to food, water and sanitation, and healthcare. Women face particular challenges in the face of climate change.[145]

79. Failing to pursue a human rights-focused climate response could have regressive impacts. Climate action also needs to be structured to correct for current disparities, not

[144] CIEL, "Katowice COP24 Outcome Incompatible with Paris Agreement," December 15, 2018, https://www.ciel.org/news/katowice-cop24-outcome-incompatible-with-paris-agreement/.

[145] OHCHR, "Analytical study on gender-responsive climate action for the full and effective enjoyment of the rights of women," May 1, 2019, https://www.ohchr.org/Documents/Issues/ClimateChange/GenderResponsive/A_HRC_41_26.pdf.

reinforce them. People in poverty are already left out of decisions that affect them, and political inequality means they risk being marginalized within the climate response.

(v) Bringing UN human rights mechanisms to life

80. Human rights treaty bodies and others should weigh in on questions that are already hotly contested in courthouses and parliaments, including how human rights obligations can be used to define States' legal duties to reduce greenhouse gas emissions individually and at a global level, what are the minimum actions that States must take in line with the latest scientific guidance, and whether human rights law gives rise to a certain threshed of action below which a State is in violation of its obligations.

81. Human rights law requires a remedy for violations, and climate change is no different.[146] Given what is now known about the widespread harm and human rights impact of either 2 or even 1.5 °C of warming, it is also necessary to determine what measures States must take to provide the required remedies for the all but certain human rights violations that climate change will bring. Human rights actors have an important role in identifying what such remedies will require.

82. Each and every human rights body should consider what it can do to make use of its existing procedures to highlight the urgency of the obligation to combat climate change. It is true that this risks overlap or duplication, but such a risk seems almost inconsequential in light of the magnitude and urgency of the threat.

83. It is beyond the scope of this report to provide detailed recommendations in this regard, but a few examples can suffice. The Human Rights Council can no longer afford to rely only on the time-honoured techniques of organizing expert panels, calling for reports that lead nowhere, urging others to do more but doing little itself, and adopting wide-ranging but inconclusive and highly aspirational resolutions. It should commission an urgent expert study to identify options available and organize a high-level working group to propose and monitor specific actions.

84. Treaty bodies should reconsider whether the general comments or general recommendations they have adopted on this issue are anywhere near sufficient given the size and nature of the challenge. They should hold meetings to discuss what sort of recommendations might be included in their concluding observations in order to press State parties to take the type of measures that can no longer be delayed. They should also reflect on how best to promote in a truly meaningful way the measures they have already adopted in relation to climate change.

85. The Human Rights Committee recently asked the United States to directly address "significant threats to the right to life posed by impacts of climate change such as flash floods, coastal flooding, wildfires, infectious disease, extreme heat and pollution."[147] In principle, this is a breakthrough but, in practice, the terms are so open-ended and non-specific that it amounts to little more than ticking the climate change box. The challenge is to reflect on what the next level of recommendation might entail in order to provide some sort of meaningful guidance as to the measures needed, or at least as to the procedures that might be adopted at the national level to pursue such questions.

86. Similarly, the Committee should build on its pioneering statements in General Comment No. 36 relating to climate change. It has already been reported that a communication has been submitted to the Committee on this issue.[148] The Committee should explore innovative ways to respond constructively and not opt for an approach that sidesteps

[146] Human Rights Council, "Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment," p. 9.

[147] Human Rights Committee, "List of issues prior to submission of the fifth periodic report of the United States of America," April 2, 2019, https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/USA/CCPR_C_USA_QPR_5_30192_E.pdf.

[148] 'Islanders complain to U.N. over Australia's climate change inaction', Reuters, May 13, 2019, https://www.reuters.com/article/us-australia-climatechange/islanders-complain-to-u-n-over-australias-climate-change-inaction-idUSKCN1SJ09J

responsibility. Civil society groups need to inform and encourage the Committee in terms of these options and can take the opportunity provided by Rule 96 of the Committee's new rules of procedure to submit "information and documentation […], which may be relevant for the proper determination of the case."[149]

VI. Conclusion

87. **The human rights community, with a few notable exceptions, has been every bit as complacent as most governments in the face of the ultimate challenge to mankind represented by climate change. The steps taken by most United Nations human rights bodies have been patently inadequate and premised on forms of incremental managerialism and proceduralism which are entirely disproportionate to the urgency and magnitude of the threat. Ticking boxes will not save humanity or the planet from impending disaster. This report has identified a range of steps that should be taken in order to begin to rectify this failure to face up to the fact that human rights might not survive the coming upheaval. It has also sought to highlight the fact that the group that will be most negatively affected across the globe are those living in poverty. Climate change is, among other things, an unconscionable assault on the poor.**

[149] Rules of procedure of the Human Rights Committee, January 9, 2019, https://undocs.org/CCPR/C/3/Rev.11