
THE 2023 FAIR SHARES DEFICIT

A CIVIL SOCIETY EQUITY REVIEW OF THE NDCS AND 2035 MITIGATION FAIR SHARES

December 2023



A damaged, submerged area is seen after flash floods in Sunamganj, Bangladesh. The people of north-eastern Bangladesh are experiencing the worst flooding in living memory © Joydeep Mukherjee / Climate Visuals Countdown

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- Centre for Environmental Justice, Sri Lanka
- CIRDS NEPAL
- Climate Watch Thailand
- Community Action for Healing Poverty Organization
- Community Initiatives for Development in Pakistan-CIDP
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- CESTA Friends of the Earth El Salvador, El Salvador
- Movimiento Ciudadano frente al Cambio Climático, Perú
- Por la Tierra AC, México
- TierraActiva Peru

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- Alliance for Tribal Clean Energy, United States
- Anthropocene Alliance, United States
- Association for the Tree of Life, United States
- Canadian Engaged Buddhism Association, Canada
- Canadian Interfaith Fast For the Climate
- Care About Climate, United States
- Center for Biological Diversity, United States
- Citizens Climate Lobby Canada
- Climate Action for Lifelong Learners (CALL), Canada
- Climate Action Network Canada (CAN-Rac)
- Climate Crisis Policy, United States
- Climate Emergency Coalition, United States
- Climate Emergency Unit, Canada
- David Suzuki Foundation, Canada
- Destination Zero, Canada
- Earth Action, Inc., United States
- Earth Justice Ministries, United States
- EcoEquity, United States
- Environmental Defence Canada
- For Our Kids, Canada
- Fridays For Future USA
- Friends of the Earth Canada
- Friends of the Earth U.S.
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- Grandmothers Act to Save the Planet (GASP), Canada
- Grandmothers Advocacy Network, Canada
- Green 13, Canada
- Green Neighbours 21, Canada
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- Kelly Creek Protection Project of Earth Island Institute, United States of America
- Movement Rights, United States
- New Progressive Alliance, Canada and the United States
- North American Climate, Conservation and Environment (NACCE), United States of America (USA)
- North Carolina Council of Churches, United States
- North Carolina Interfaith Power & Light, United States
- Physicians for Social Responsibility Pennsylvania, United States
- Shift: Action for Pension Wealth & Planet Health, Canada
- Stop Line 9 Toronto, Canada
- The Climate Reality Project Canada
- The Earth Bill Network, United States
- Unitarian Universalist Service Committee, United States
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- Wall of Women, United States
- Windfall Ecology Centre, Canada
- World Federalist Movement - Canada

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- Aotearoa New Zealand Human Rights Foundation
- ARRC (Australian Religious Response to Climate Change)
- Climate Action Merribeek, Australia
- Climate Action Network Australia, Australia
- Climate Justice Programme, Australia
- College of Nurses Aotearoa, New Zealand
- New Zealand Climate Action Network
- New Zealand College of Public Health Medicine
- Parents for Climate Aotearoa, New Zealand



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Every winter the National Capital Region of India is covered in a cloud of thick smog. Air quality index monitors max out with ratings of 999 and pollution reaches 50 times the level deemed safe by the World Health Organization, making breathing Delhi's air as bad as smoking 50 cigarettes. Some of the biggest emitters are Delhi's more than 10 million vehicles, like cars and trucks. Dust from the city's construction boom is also a contributor to the city's smog. Brick kilns that burn solid fuels are another factor. So is coal-fired power generation.

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INTRODUCTION

In the more than three decades since the negotiation of the United Nations Framework Convention on Climate Change, industrial society continues to pump greenhouse gas (GHG) pollution into the atmosphere. Now, in line with decades of projections, the climate has grown increasingly unstable. July to October 2023 have all set new records for their respective month's hottest recorded temperatures; with July being the hottest ever recorded in human history. The impacts of this are being felt everywhere, from heatwaves in the likes of Greece, and Morocco (the latter surpassed 50 °C for the first time in 2023), to wildfires with unprecedented severity across the globe, to unusually heavy rain in China (Beijing), Libya (Derna), South Africa and the US (New York).

Global warming has reached about 1.2 °C above pre-industrial levels, and the action needed to limit warming to 1.5 °C is unprecedented in scale. We face the need for almost unimaginable transformation, yet we have no choice but to try. The longer we continue to extract oil, gas, and coal from the ground and spew greenhouse gases into the atmosphere, the closer we stumble to climatic destabilization, with those in less wealthy countries being hit first and hardest.

It has been eight years since the Paris Agreement was reached, and while there have been several milestones in implementing the Agreement, this year marks the beginning of the new phase. COP 28 will host the first Global Stocktake (GST), a pivotal part of the Paris Agreement structure meant to help countries collectively raise ambition. The GST will then feed into the next round of Nationally Determined Contributions (NDCs). This round of NDCs, which are meant to set targets for 2035, are critical to meeting the temperature goals for the Paris Agreement. Current NDCs and implementation levels thus far are not sufficient for keeping warming to "well below" 2 °C or aiming for 1.5 °C. The world cannot afford another lost decade of climate inaction.

This report will reevaluate the existing NDCs, including how a selection of countries' current NDCs (since some have been updated since our last major update) stack up against their fair share. Our fair share calculations are then also extended to 2035, giving fair-shares targets to consider as countries begin the process of developing the next round of NDCs.

Unfortunately, while the pledged ambition has increased in some NDCs since 2015, collectively, they have not yet come close to putting the world on track for meeting the goals of the Paris Agreement, nor do any developed or rich countries' NDCs contain targets that come close to their fair share. This has profound implications for the planet, since rich countries (with considerable historical responsibility and capacity) are responsible for the bulk of the climate action needed. This and the failure to deliver meaningful climate finance at the scale needed has led both to a worsening crisis and deepening of the inequity of the crisis. Continued support for the fossil fuels industry and a threatening dash for dangerous distractions, like carbon offsets, geoengineering and other risky technologies, has led to further delays in meaningful action to reduce emissions at source.

As the climate crisis worsens, there has been and likely will continue to be pressure to abandon principles of justice in the name of expediency. The social movements, environmental and development NGOs, trade unions, faith and other civil society groups that have come together to present this report, representing a wide spectrum of organizations, reject this pressure. Climate change is a true crisis that demands an emergency response. Equity matters in this response, not only because it is a good in itself, but also because equity is the key to cooperation – and cooperation is indispensable in addressing the climate crisis. Climate change is the most profound "commons problem" humanity has ever faced, and it can only be managed with durable and robust cooperation.

The CSO Equity Review coalition came together in 2015 before COP21 in Paris, a key political moment, to make a strong collective statement about the imperative for countries to pledge doing their fair share to reduce global emissions. Now, we have arrived at another key political moment. The GST at COP 28 should be a clear turning point in the implementation of the Paris Agreement and the response to the climate crisis. This GST and the NDCs coming in the next few years are among the last intervention points to have any chance of keeping 1.5 °C on the table. Our coalition is coming together again to call for countries to commit to a fair-share NDCs by 2025, NDCs which, for the wealthy countries, must include the provision of climate finance and, for fossil fuel extracting nations, must include plans to equitably and rapidly phase out fossil fuel extraction. These are the key pieces of the equity-based strategy for stabilizing the climate and preserving a world in which human civilization can thrive.

METHODOLOGY IN BRIEF

All countries must accept responsibility for meeting at least their fair share of the global effort to reduce emissions to tackle climate change. This section discusses our methods for assigning fair shares of this global effort to each country.

Some countries have much higher capacity to act than others, due to their higher income and wealth, level of development and access to technologies. Some countries have emitted a great deal for a long time, and thrive from the infrastructure and institutions they have been able to set up because of this. Some countries of course have limited capacity, already strained by a worsening climate crisis and development needs, and have emitted very little. These aspects are all considered important dimensions of fair share.

National fair shares must focus on both historical responsibility and capacity, which directly correspond with the core principles in the UN climate convention of “common but differentiated responsibility and respective capabilities” and the “right to sustainable development.” Our fair shares assessment is based on the Climate Equity Reference Framework and the calculations are carried out using the Climate Equity Reference Calculator.¹ Our definition of fair shares results in an “equity range,” which takes into account:²

1. **Historical responsibility**, in our analysis measured as countries’ contribution to climate change in terms of cumulative emissions since 1850 and 1950, respectively (in both cases, discounting the survival emissions of the poorest)

2. **Capacity to take climate action**, defined as national income over what is needed to provide basic living standards as the principal indicator (up to \$ 7,500 per person, per year). In the “medium progressivity” end of our fair share range, all incomes above this exemption level are considered a country’s capacity, while in the “high progressivity” case, incomes above this level are considered capacity to a gradually increasing level until they reach a second threshold, above which we consider all income to be a country’s capacity.

This approach means each country has a unique fair share. Further, this fair share is also dynamic, in the sense that the fair share will change over time as countries’ relative incomes and relative proportion of accumulated emissions change.

Once a country’s share of global responsibility and capacity is calculated, this share is used to assign its fair share. For example, a country with 10 % of the global combined responsibility and capacity will be expected to contribute 10 % of the global effort. This number can then be turned into a specific emissions reduction by dividing up the global mitigation effort needed to meet the Paris Agreement temperature goals. In this analysis, we used the the LED Pathway³ from the IPCC’s 6th Assessment Report – which has a reasonable chance of limiting warming to 1.5 °C by 2100 and a very good chance of staying well below 2 °C – to represent these goals. This provides the national fair share reduction in metric tonnes of greenhouse gas, which can be compared to the country’s current NDCs and climate pledges, as well as those proposed for 2035.

It is worth noting that, in the case of rich countries with high historic emissions, the fair share of climate effort is generally larger than the potential domestic climate action. Conversely, the mitigation potential in lower income countries is typically larger than their fair share. Climate finance can be utilized to address these two complementary realities, in that wealthy countries will need to provide climate finance that is commensurate with the amount by which their fair share exceeds even the most ambitious domestic mitigation, which they also need to undertake. The less wealthy countries in receipt of this climate finance would thus be enabled to undertake additional reductions beyond their fair share.



Airliner taking off, California. Flying is a major contribution to climate change. © dsleeter_2000 / flickr

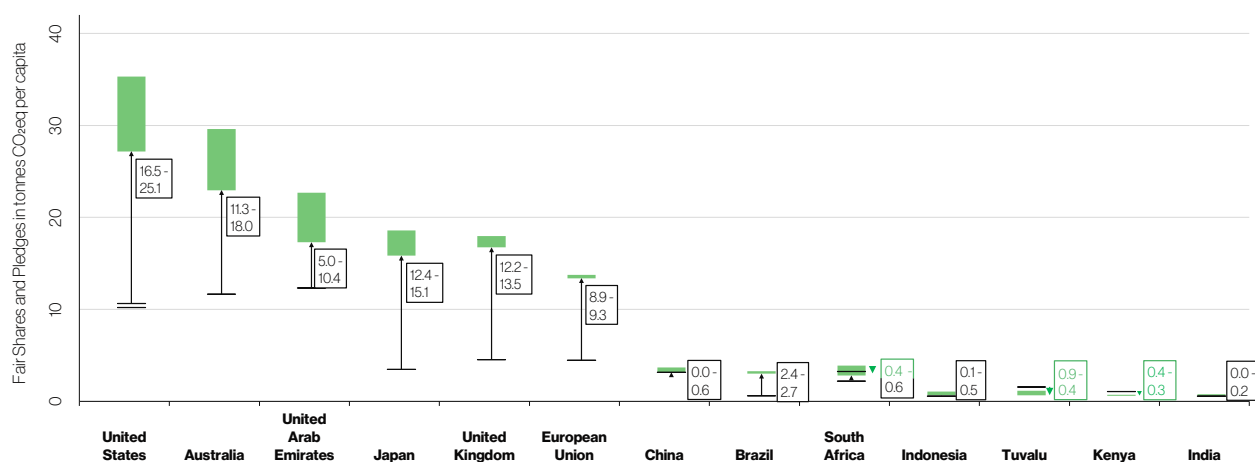
NDC ANALYSIS OF SELECTED COUNTRIES

The figures and table below compare the results of our assessment of the NDCs from a selection of countries with their fair share emission reduction benchmarks. To allow straightforward comparison across countries of vastly different sizes, these numbers are presented in tons of emission reductions in 2030 per capita, relative to our projected baseline emissions.

In the figure, the green band shows our fair share range; the horizontal black lines show the mitigation pledged in countries' NDCs, both for 2030. In order to be considered a "fair contribution" under at least the less stringent of our fair shares benchmarks, the horizontal

black NDC lines would need to be overlapping with the green band. If the horizontal black line were above the green box, the pledge would exceed both our fair share benchmarks; horizontal black lines below the green band indicate NDCs that fall short. The vertical black arrows and their number labels show the shortfall of the NDC pledges relative to the fair share range, with the label's ranges indicating the minimum and maximum shortfall, depending on which fair shares benchmark the NDC is compared with. Vertical green arrows and their number labels show by how much NDC pledges exceed, i.e. are more ambitious than the fair share, with number labels in green font showing the range of this exceedance.

Selected National NDC Mitigation Pledges Against Fair Share Benchmarks



2030 Per Capita Fair Shares and NDC pledges (tonnes of CO₂eq per capita below baseline in 2030)

	United States	Australia	United Arab Emirates	Japan	United Kingdom	European Union	China	Brazil	South Africa	Indonesia	Tuvalu	Kenya	India
<div></div> Fair Share Range	34.7 26.6	29.0 22.4	22.1 16.7	18.0 15.3	16.2 17.4	12.8 13.2	2.6 3.1	2.5 2.7	2.2 3.3	0.1 0.5	0.1 0.6	0.1 0.2	0.02 0.2
<div></div> NDC (range if applicable)	10.1 9.6	11.1	11.8	2.9	4.0	3.9	2.6	0.04	2.7 1.6	0.0	1.0	0.5	0.0
<div></div> Pledge at least	16.5	11.3	5.0	12.4	12.2	8.9	0.01	2.4		0.1			0.02
<div></div> Shortfall up to	25.1	18.0	10.4	15.1	13.5	9.3	0.6	2.7	0.6	0.5			0.2
<div></div> Pledge at least									0.4		0.4	0.3	
<div></div> Exceeds up to										0.9		0.4	

Figure 1: Comparison of mitigation fair shares and pledges of example countries (in tonnes of CO₂eq of mitigation below baseline in 2030 per capita per year). For each country or region, the horizontal black line(s) show the NDC pledges for 2030; the green band shows the fair share range, delineated by 1850-High and 1950-Medium progressivity fair share benchmarks for 2030; vertical black arrows: minimum shortfall between NDC pledge and fair share benchmark; black number labels: range of shortfall between NDC pledge and fair share; vertical green arrows: maximum exceedance of NDC pledge over fair share; green number labels: range of exceedance of NDC pledge over fair share.

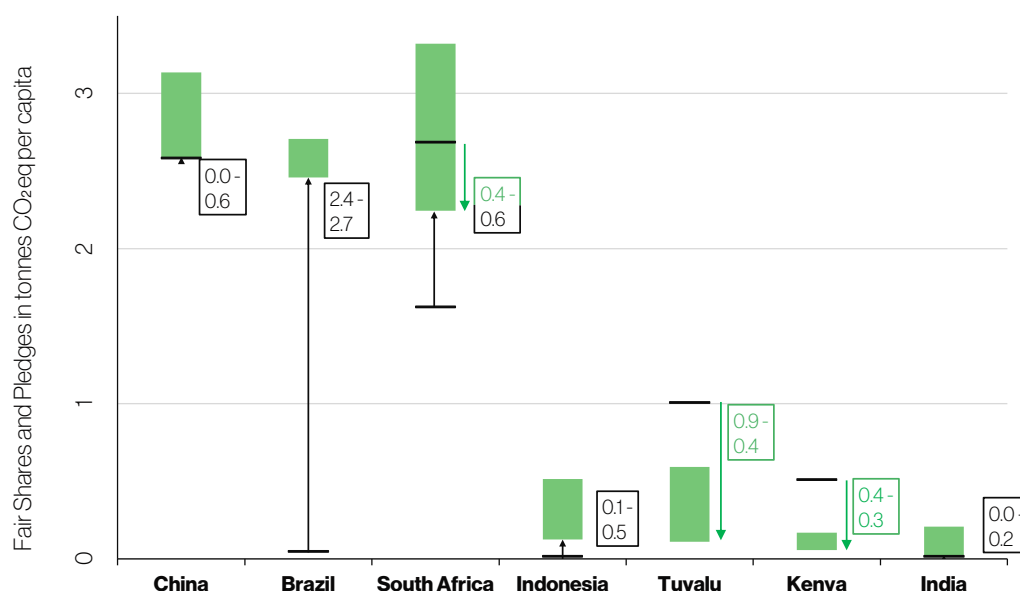


Figure 2: Comparison of mitigation fair shares and pledges of subset of example countries. This chart shows a subset of countries depicted in Figure 1, with fair shares below 5 tons CO₂eq per capita of mitigation, with a different vertical scale to better show details for this subset. For other notes, see caption of figure 1.

As in our previous reports, and despite some updates to NDCs, the rich and developed countries in the global north fall well short of their fair shares. **The US, UK, EU, Japan, and Australia all would need to more than double the ambition stated in their NDC to achieve even the lower end of their fair share. Among the high-income countries, the United Arab Emirates come the closest with their pledges amounting to roughly two-thirds of what could be considered a fair share NDC.**

Pledges of the Global South countries in the chart are generally close, or at least much closer, to meeting or in a few cases exceeding their fair shares. China's and South Africa's NDCs mostly meet their fair share of effort – at least as reflected by the less stringent of our fair share benchmarks – though for South Africa this is only the case for the higher end of its target range. For India and Indonesia, we assess that the mitigation targets of their NDCs would not result in any additional mitigation relative to baseline. This is because, in both countries, targets are expressed relative to baseline projections that are implausibly high and/or have not been updated even though reality has shifted.⁴ Thus, we assess both countries as falling short of their fair share thresholds, though it is worth noting that their per-capita shortfalls are still very substantially smaller than those of the high-income countries. This points to the urgent need for both countries to update their NDC mitigation targets based on current data and projections. Additionally, in India, current policies and actions that are already being taken would overachieve the mitigation target in the NDC. Given this, it is likely that an NDC update that reflects no additional ambition beyond current policies would meet India's fair share benchmarks. Brazil, for its part, falls noticeably short of its fair share, even with the favourable approach to quantifying its NDC taken here.⁵ Conversely, the lowest-income countries evaluated, Kenya and Tuvalu, actually exceed what their fair share benchmark would require, as does the higher end of South Africa's NDC range. Figure 2 provides a zoomed in graph of the

countries with fair shares of less than 5 tons CO₂eq of mitigation per capita, since it's much easier to see the details when the scale is not overwhelmed by the countries with much larger fair shares.

This pattern has been seen since our NDC analyses started in 2015. Wealthier, developed countries have fallen very far short of a fair share of effort, while developing countries are closer to the mark. The lack of ambition in the Global North is particularly concerning, though. First, because they have the biggest fair shares, shortfalls from countries like the US and UK have more impact than small shortfalls in countries like South Africa. **For example, the ambition gap between the US' current pledge and their fair share is three to five times the size of the entire South African Fair Share NDC.**

Additionally, lack of ambition in the Global North has impacts on climate action and international cooperation. Most Global North countries have mitigation fair shares that are larger than can be met exclusively within their borders, even assuming extremely ambitious domestic actions. Therefore, in addition to very deep domestic reductions, the remainder of their mitigation contribution must be made by enabling an equivalent amount of emissions reduction in the Global South through financing and other support.

Climate finance has grown even more important as the impacts of climate change worsen, with developing and lower-income countries (who are also getting the worst of the impacts) being compelled to prioritize disaster recovery and suffer worsening loss and damage. This will significantly affect their ability to self-finance ambitious mitigation programs. Climate finance has not been flowing at the necessary rate, and may be falling even farther short than domestic mitigation. For the Paris Agreement goals to be met, it's essential that Global North countries increase their ambition, with fair share NDCs that include delivering on climate finance and other forms of international support across all areas.



Pastoralists living in the Ewaso Ngiro river basin in central Kenya are digging for water and fear they will have to begin large-scale cattle destocking if the next rains are poor. With much of the river system totally dried up in Isiolo county for months, there is no option but to sink 'shallow wells' into the river bed and scoop out the filthy, mud-coloured groundwater with domestic utensils, then lug it on donkey carts to villages. In the merciless heat of the dry riverbed, it's exhausting work that leaves little energy for much else. the livestock drink from troughs set up alongside the wells. © Denis Onyodi / KRCS

CLIMATE INACTION AS DENIAL

Our first report on fair share NDCs was released in 2015, in the lead up to the Paris Agreement. While much of our analysis and methodology remains consistent, time is an important aspect of any discussion on climate change. It has now been eight years since the Paris Agreement was signed, without significant global emissions reductions, widespread fossil fuel phase out plans, or the needed major increases in climate finance. Instead there seems to be emerging significant efforts to hide inaction by putting stock in unproven dangerous distractions like carbon markets and techno-fixes. Delayed action has consequences.

Every additional molecule of CO₂ adds to the climate problem, since their effects are cumulative. Eight years of essentially inaction means a worsening crisis, not a static one, as continued emissions continue to take the world closer to the 1.5 °C threshold. The speed at which fossil fuel phase out will be needed to meet the Paris Agreement goals has increased significantly. Every fraction of a degree of additional warming increases the risks of crossing irreversible tipping points, and catastrophic cascades of disruption. All of human society, countless ecosystems, whole biomes and species, and all we love and rely on is existentially threatened. After decades of delay and inaction, “dangerous anthropogenic interference with the climate system” is already occurring, and its consequences are everywhere. Clearly, there is no atmospheric space left for any “safe” or “incremental” resolution of the climate crisis. The safe landing zone is behind us. GHG emissions, and fossil fuel use and extraction, must be phased out as rapidly as humanly possible if we are to avoid catastrophic and irreversible damage to the climate system.

This inaction is a form of climate denialism, because it can only be rationalized by denying the scale and urgency of action that climate science so clearly articulates. This inaction also raises a challenge for the fair shares framework, because countries’ failure to act at the required scale and speed increases the difficulty of meeting global mitigation goals. It is important to remember, though, that the responsibility for this negligence does not lie with all countries “in aggregate.”

Thus, continued delay only makes the way forward harder for all countries: A central aspect of establishing countries’ fair shares of emissions reductions is the determination of the total *global* mitigation effort, which is defined as the distance between current emissions trajectories and those consistent with 1.5 °C. The inaction of countries increases that global effort, that is divided up into fair shares. Thus, most of the shortfall between countries’ fair share obligations and their actual emissions, would be added to *other countries’* future fair shares, instead of holding them accountable for this shortfall.

To enable this accountability, the shortfall for each country would need to be calculated, which poses some conceptual challenges. For example, it would require determining a date from which accountability for this shortfall becomes distinct from the usual treatment of “historical emissions.” Additionally, these shortfalls do not only make future mitigation far more challenging, they also have profound implications on worsening the impacts of the climate crisis, increasing adaptation needs and loss and damage impacts. These impacts will not be felt equitably.



Steel industry in Benxi, China, in close proximity to residential flats (shown in the foreground) © Andreas Habich

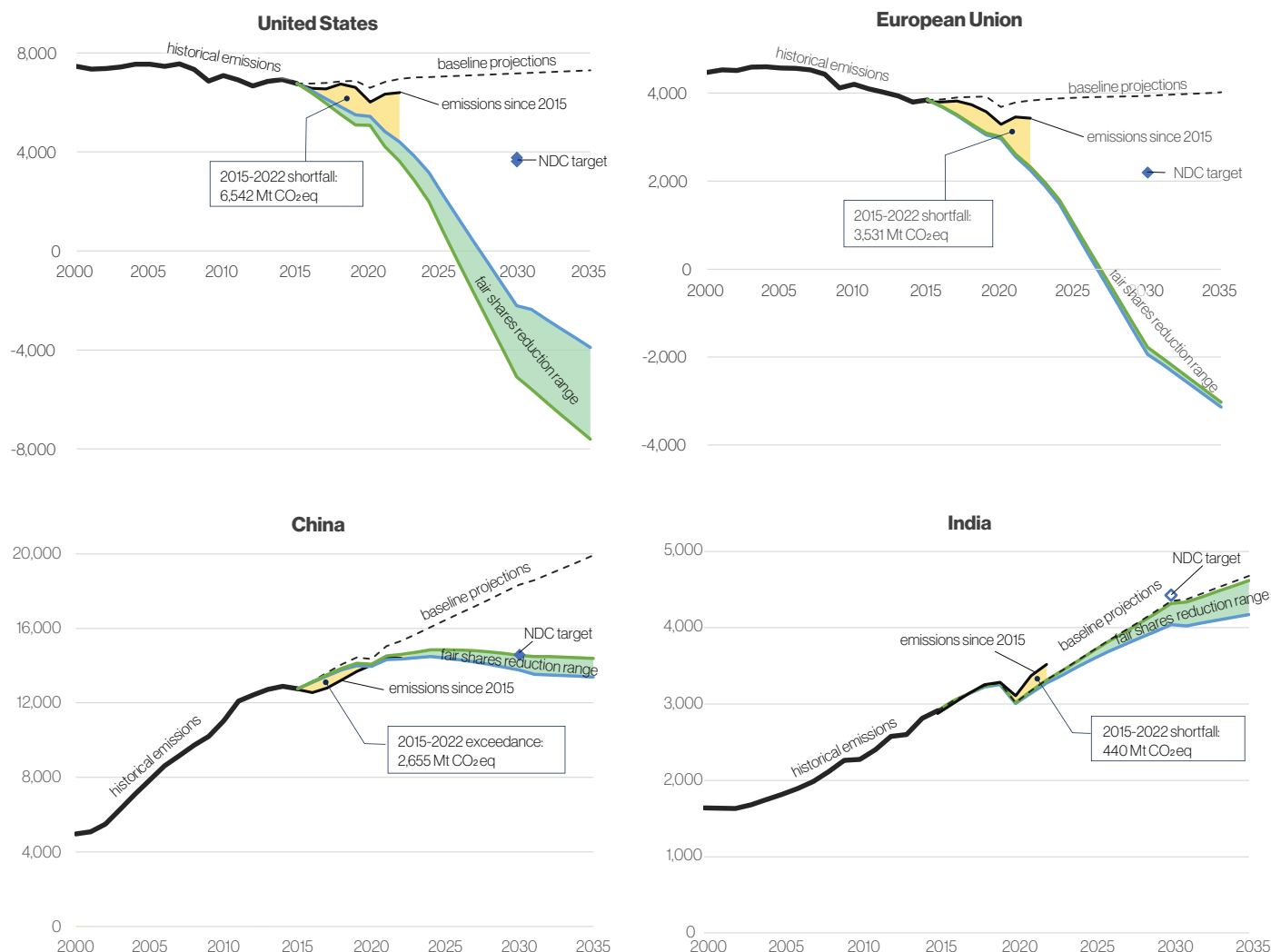


Figure 3: Historical emissions, future fair shares, NDCs and post-Paris fair share shortfalls (or exceedance) for selected countries (USA, EU, China, India). Chart shows historical emissions (solid black), baseline projections (dashed black), the fair shares range (green area) is demarcated by the 1850-High-Progressivity (green line, yellow diamonds) and 1950-Medium-Progressivity (blue line, orange diamonds) CSER fair shares benchmarks, NDC targets (blue diamonds), and cumulative shortfall (or exceedance) for the 2015-2022 period (i.e. since the adoption of the Paris Agreement) between the least stringent CSER fair shares benchmark and actual emissions (yellow area with callout label). All figures in annual MtCO₂eq excluding LULUCF.

In addition to plotting fair share ranges out to 2035, the chart above (and table 1 below) show one possible approach to quantifying the shortfall of mitigation relative to fair shares benchmarks. The approach taken here considers the shortfall of countries' mitigation vis-a-vis their fair shares benchmarks since the adoption of the Paris Agreement (i.e. the cumulative amount that their actual emissions were higher than what they should have been according to their

fair share) to be the amount that should be subject to additional accountability. In this year's report, we are merely quantifying these amounts, but clearly a future improved fair shares framework should take these recent shortfalls into account when calculating future mitigation fair shares for countries and, for that matter, fair shares for addressing adaptation and loss and damage.

	United States	Australia	United Arab Emirates	Japan	United Kingdom	European Union	China	Brazil	South Africa	Indonesia	Tuvalu	Kenya	India
Cumulative Shortfall (Exceedance) in the post-Paris period (2015-2022)													
per capita (relative to 1850 high)	3.5	3.3	0.9	1.9	1.5	1.0	(0.2)	0.3	0.5	0.3	0.01	(0.00)	0.04
in Mt CO ₂ eq (relative to 1850 high)	9,300	659	67	1,914	788	3,531	(2,655)	448	220	563	0	(0)	440
per capita (relative to 1950 medium)	2.5	2.5	0.2	1.6	1.7	1.1	(0.2)	0.3	0.6	0.3	0.06	0.01	0.05
in Mt CO ₂ eq (relative to 1950 medium)	6,542	495	19	1,602	892	3,810	(1,819)	506	288	633	0	5	562

Table 1: Cumulative shortfall (or exceedance) of actual emission reductions relative to fair shares mitigation in the post-Paris period (2015-2022).

Results are shown in reference to both of the Civil Society Equity Review's fair shares benchmarks and in both absolute and per-capita terms.

These graphs also demonstrate that there are different ways in which these shortfalls occur and in which they appear likely to be perpetuated into the future. For example, the US and EU not only already accumulated sizable shortfalls between their 2015-2022 actual emissions relative to their fair shares, but they both also set inadequate targets, which will continue to exacerbate this trend. Further, and to differing degrees, they have also so far failed to

implement domestic mitigation action suitable to achieving even those inadequate targets.

India's NDC target, in contrast, is very close to its fair share, and it's possible that it will still be met. Since 2015 though, India's emissions have not followed its fairshare pathway, with a cumulative emissions reduction shortfall of 440 MtCO₂eq since 2015. The US and EU shortfalls are much larger than India's (6,542 and 3,531 MtCO₂eq

respectively⁶⁾, but any substantial shortfalls of large absolute emitters are a threat to succeeding staying below Paris Agreement temperature limits. This is why we have been stressing, since our very first report in 2015, that *all* countries, whether they have small or large greenhouse gas emissions, whether they have a little or a lot of wealth and income, must at the very least commit to contributing their own fair share of the global mitigation effort, and then implementing measures to achieve these pledges, to make overall 1.5 °C-consistent contributions.

Interestingly, China has actually reduced emissions since 2015 faster than its fair share range would have required, in addition to having an NDC target broadly consistent with its fair share. However, just like India and many other middle- and most lower-income countries, China has to reduce its domestic emissions faster than its fair share would demand to keep Paris Agreement targets in reach. As the chart also clearly shows, its absolute emissions are still increasing (albeit slower than they would have absent China's mitigation action) when they have to start decreasing. This is part of the unavoidable structural injustice of our present moment: that many medium- and low-income countries have to implement emissions reductions beyond their own fair share to meet global climate targets. For these countries, this means that they should be receiving climate finance, means of implementation and/or other international support according to their respective circumstances to implement these additional reductions. For China, in particular (but not only for China), it is imperative to urgently find ways in which meaningful international cooperation can enable it to go beyond its fair share without this additional action amounting to an unacceptable injustice (see box).



Fire boat response crews battle the 2010 Deepwater Horizon accident in the Gulf of Mexico, the largest oil spill in history with over 3 million barrels of oil spilled into the ocean, with far-reaching devastating consequences for ecosystems across the region. Public Domain



The open pit lignite mine of Garzweiler (Braunkohle Tagebau Garzweiler) is a site of extraction of lignite, which, as a low-energy form of coal is particularly polluting when burned for power generation. Rhineland-of-North-Westphalia, Germany © Bert Kaufmann

BOX: INTERNATIONAL COOPERATION AND THE CASE OF CHINA'S FAIR SHARE

Multiple countries have significantly increased their income and economic status since 1992, when the UNFCCC was agreed. Developed countries frequently emphasize this point when pushing back against differentiation or any discussion of their obligations. China has often been the focal point for these complaints, despite the fact that China is not the richest or largest per capita emitter in this category of countries. But its growing geopolitical power, and the fact that it is seen as a major economic and geopolitical rival by the US and EU, means China is often the main focus of this dispute.

Our fair shares approach is dynamic, so China's fair share as calculated in this and previous Civil Society Equity Review reports *does* reflect its growing emissions and capacity. Even so, **China's per capita historical emissions and capacity remain far lower than that of many developed countries**

Like most countries for which that is the case, China's fair share is far lower than its mitigation potential. And given the total size of its economy and its emissions, ensuring that China can maximize its mitigation potential is essential to reaching a 1.5 °C-compatible global pathway, even though doing so means action well beyond its fair share. And this is true even though China's pledge *actually meets* its fair share.

Our approach typically assumes that international support – finance, technology transfer, capacity-building – is a catalyst that will enable mitigation action in developing countries beyond what is fair, and in many cases, what would otherwise be possible. Given its unique geopolitical presence, however, the idea of China receiving international support is deeply controversial, especially in the United States. Indeed, in many cases, China is actually a source of finance and technology to lower-income countries.

Regardless of how it happens, China must massively increase its mitigation ambition, well beyond its fair share. It is neither fair nor equitable to expect China to do this quickly enough without international support, but given the current landscape of global politics, it may well be necessary. Importantly, even in scenarios where little or no climate finance would flow into China, this would not necessarily mean that there couldn't be any international *cooperation* – quite the contrary: deepening global ambition *requires* deepening international cooperation. What such cooperation might look like is unclear, but a bare minimum should be an immediate cessation of policies aimed at crippling Chinese innovation and economic competitiveness, such as those imposed by the Trump and Biden administrations, in favour of industrial policies that promote both domestic economic transformation and international cooperation. These policies exacerbate geopolitical tensions and also risk slowing down China's own energy transition.

This would be an important start, and much deeper cooperation will be needed, meaning that lowering geopolitical tensions is absolutely critical. Continued escalation and confrontation between the US and China will make reaching the Paris Agreement goals an impossibility, with drastic consequences for the entire globe. China's success in economic development and in building the state capacity to shape markets for public purposes has put it in a position to achieve its own climate transition without external support, and to make a crucial contribution to achieving the global climate transition. In a spirit of global solidarity, this leadership should be recognized and encouraged rather than vilified by the US and other developed countries.

The core of the Civil Society Equity Review argument has always been that a fair-shares approach is pragmatic as well as just. We have always asserted that **the level of cooperation required to actually meet the Paris Agreement goals will be impossible to achieve without equity**. This is especially true in the context of increasing US-China tension. At their best, the international climate negotiations should be a space that can unlock new forms of international cooperation and solidarity. This can only happen if all countries accept, and build policies around, a fair-shares approach.

Any rapid global transformation toward carbon-free, climate resilient development will require all countries to do their fair share in an extremely challenging global effort. To be crystal clear, any global climate transformation that allows the wealthy countries of the Global North and the wealthy people across the world to continue to delay

raining in their excessive greenhouse gas intensive activities, often while cynically pointing fingers at and demanding action from others, will fail to engender the robust international cooperation necessary for success, and thus will fail to stabilize the climate system in time to prevent a true global catastrophe.



Fishermen on the banks of the river Yamuna, surrounded by clouds of toxic foam on the water surface. A vast stretch of the Yamuna river is covered with white toxic foam, caused in part by pollutants discharged from industries surrounding New Delhi. The 1,376 km (855 mile) Yamuna is one of the holiest rivers for Hindus. It is also among the most polluted in the world, with pollution caused by a high level of phosphates and surfactants in the river, combined with a low level of oxygen in the water and lower winter temperatures.

© Raunaq Singh Chopra / Climate Visuals

2035 NDCS

While the shortfall vis-a-vis countries' fair shares (not only in terms of their current targets but also in terms of their implementation efforts and regarding their provision of climate finance and support) should be a focus of the Global Stocktake, the countries' processes for developing new NDC targets for 2035 is also about to begin. In addition to these processes being informed by the outcome of the Global Stocktake, they should also be informed by considerations of what target setting fair shares of the global mitigation effort would imply. After all, the CMA's guidance on the element to be elaborated on in the NDCs includes a justification why parties consider their contribution to be fair and ambitious.

Using the same methodology and pathway explained above, we have calculated out what fair share targets would be for the 2035 targets. These are shown for four countries in the graph above and, for our complete set of example countries, in the table below. No country has yet expressed a 2035 target publicly, which is why there are no 2035 targets to assess against our fair shares benchmarks. However, these calculations are nevertheless important since they provide useful indications where countries' NDC mitigation targets should be set to satisfy the requirement that their contributions should be fair and ambitious. These results can also serve climate movements and civil society around the world to inform what demands to make of their governments when determining 2035 targets.⁷

	United States	Australia	United Arab Emirates	Japan	United Kingdom	European Union	China	Brazil	South Africa	Indonesia	Tuvalu	Kenya	India
2035 Per Capita Fair Shares (tonnes of CO ₂ eq per capita below baseline in 2035)													
1850-High Progressivity	41.2	34.3	29.2	22.6	19.4	15.9	3.8	3.2	2.8	0.2	0.2	0.1	0.04
1950-Medium Progressivity	30.9	26.4	22.4	19.5	18.3	16.2	4.5	3.5	4.2	0.7	0.8	0.2	0.3
Reduction (%) below base year ...	2005	2005	2019	2013	1990	1990	2005						
1850-High Progressivity	201%	174%	85%	204%	211%	162%	39%						
1950-Medium Progressivity	152%	130%	54%	177%	200%	164%	47%						
Reduction (%) below baseline projection in target year (2035)													
1850-High Progressivity									31%	5%	8%	5%	
1950-Medium Progressivity									46%	20%	40%	14%	
Reduction (%) below GHG intensity of GDP in base year							2005						2005
1850-High Progressivity							72%						52%
1950-Medium Progressivity							74%						57%

Table 2: 2035 mitigation fair shares for a selection of countries. The same pair of two fair shares benchmarks are expressed in a number of different ways that countries typically use to communicate mitigation targets in their NDCs. All figures are for mitigation in 2035 of total GHG emissions exclusive of LULUCF.

Again, high-income countries with considerable capacity continue to have large fair shares of the global mitigation needed. Developing countries continue to have relatively smaller fair shares. And they also will continue to have climate mitigation potential that exceeds their fair shares, which makes putting forward additional measures, for example in conditional NDCs, and the availability of climate finance to implement them extremely important. Developing countries must be empowered to rapidly shift to zero-carbon energy, and public finance has a critical role to play in building accessible economic systems for people and communities. Where circumstances do not make this progress possible, developing countries could be forced into structural traps, and face compromised development.

Civil society and people's movements in developing countries are pressing their governments to fulfill their pledges with decisive moves away from fossil-fuel dependent and growth-oriented economies that perpetuate inequality. This means planning for ambitious leapfrogging to zero-carbon societies, assessing the necessary resources, and internalizing how such development trajectories can enhance well-being and provide meaningful economic development.

To support this, civil society and developing countries must be clear and unrelenting in their demands for international climate finance, which is essential to curb emissions enough to meet the Paris temperature limits. Much (but not all) of the finance that developing

countries need to achieve their Paris goals is properly seen as the responsibility of the wealthy countries. This includes financial assistance to nations suffering loss and damage of climate change. The failure of wealthy countries to meet the wholly inadequate US\$ 100 billion climate finance goal on time or honestly – much of the proffered finance has come as loans – serves as a reminder that their historic responsibility continues to build to this day.

Underlying this is the clear need for wealthy countries to act to slow global climate impacts, including through their respective domestic climate ambition. Parties should pursue equity-aligned target setting – as they revise 2030 targets, and create new 2035 targets.

All countries can support such equity aligned action calling for greater clarity and transparency on economy-wide and sector transformations in line with the goals of the Paris Agreement. The IPCC 6th Assessment Report refers to a number of key transformations which are needed, including energy sector, industrial and agricultural transformation. Countries must recognize their common but differentiated responsibility and embrace their fair shares when setting new targets. Countries also cannot hide behind empty "net zero" targets that not only imply large amounts of offsets or rely on unproven technologies rather than concrete reductions, but that are also typically set for dates too far into the future, thus distracting from urgently needed immediate-term action.

DISCUSSION

The results of the NDC analysis are fully consistent with the findings from our previous reports. This is not surprising since the increases in ambition have not meaningfully closed the ambition gap and, eight years after the Paris Agreement was adopted, global emissions are still increasing. This inaction, however, does not mean that we're still stuck back where we were in 2015. Rather, the climate crisis has

continued to worsen, with impacts becoming sharper and more pronounced each year, and the carbon budget has continued to shrink, profoundly narrowing possible pathways to limiting warming to 1.5 °C.

RELEVANCE FOR THE GLOBAL STOCKTAKE

The first Global Stocktake (GST) is an activity to take inventory of progress on the implementation of the Paris Agreement, but countries have gone into this process well aware of the gaps between what is needed and what is being done, and how shortfalls are compromising the global agreement. Simply restating this well-known if dismal reality is insufficient to meet the intended purpose of the GST – increasing parties' action and support, as well as enhancing international cooperation for climate action. Unfortunately, the summary of the Technical Dialogue of the GST released in September stopped short of going much beyond this mere restatement of well-known gaps. The political phase of the GST at COP 28 must do better, much better.

The outcome of the GST must include a clear, agreed, high-level call to action, with additional language reinforcing the need for an extremely ambitious, equity-based mobilization. How these 'ways forward' are articulated could make or break the first GST. They must be actionable and increase clarity and understanding of global pathways according to the latest science.

As part of this high-level call to action, all countries should agree to bring revised NDCs for 2030 showing increased ambition to

meet their fair share, if they have not already done so. This includes countries that have already revised their NDCs recently but nevertheless still fall short. As part of this scale-up, developed countries must pledge to massively scale up climate finance. And, of course, all countries must actually deliver on their pledges. All countries should also begin the process of determining their 2035 targets within climate plans (NDCs and LT-LEDS) that meet their fair share.

Importantly, the GST outcome must not be seen as something that represents the end of the GST process at COP 28, but rather it must be seen as, and designed as, a starting point to ensure future activities under the Paris Agreement that continue to build on the GST outcome, guiding Parties towards a stronger equity-based approach. Our future emissions are dependent on decisions and interventions made today. Immediate, ambitious action is what counts in addressing domestic and global inequality and realizing sustainable development wins from climate actions. In all regards, the 2050 date threatens to become a critical distraction. Action, here and now and in the next few years is what matters.

INTERNATIONAL SUPPORT AND COOPERATION

Simply put, a successful global response to the climate crisis is impossible to imagine if the gaping climate finance gap is not closed. Needless to say, this must be done with sources that are public, new and additional, and do not create any additional debt obligations. This effort must also address the urgent need to accelerate finance for adaptation, which currently accounts for no more than 6 to 7 % of the current, woefully inadequate total delivered climate finance. And of course there is the pressing need for an effective Loss and Damage Finance Facility that is subsequently provisioned at the

necessary scale. Details remain to be negotiated, and many are critically important, but it is absolutely clear that such a radical recalibration of the actual finance needs will have to be the basis of negotiations around the New Collective Quantified Goal. Yet even today's radically insufficient finance goal is not being met. Even overly generous accounting practices that grossly overestimate the actual value of climate finance delivered indicate that Global North countries failed to meet this level in 2020 and every year since, and there is still no certainty that it will be met this year.

INEQUALITY

For the broad coalition of climate movement groups and civil society organizations that produces this report, equity is an absolutely essential element in successful climate action, as both a pragmatic measure and a question of justice. This is true as well of equity *within* countries. Most of our focus has been on equity between countries, being centered in the international UNFCCC space. However, extreme inequality within countries cannot be treated as an unrelated matter. If the challenge of climate stabilization – which necessitates driving global carbon dioxide emissions toward zero by 2050 – is to be achieved, the effort must proceed by creating just, inclusive and very low carbon development pathways to guarantee dignified standards of living for all. While all countries and people should be expected to contribute earnestly to this global effort, those contributions must be fairly distributed. In every country today, there are both incredibly wealthy and poor individuals and the top 1%, and for that matter the top 10%, regardless of where they live, are disproportionately responsible for climate emissions.

A true fair share approach then would see fair share principles applied to equitably divide the necessary domestic effort among socio-economic groups *within* countries. Government policies should be designed to ensure that no community is disproportionately being burdened. Determining fair shares domestically may well require different indicators than the international effort, and weigh capacity as income and wealth more heavily, and may need to take heed of other nationally important factors of inequality such as race or regional and urban/rural divides.

But regardless of the exact formula for determining fair shares within a country, it is necessary to do so. Repeating the approach followed by the fossil fuel and other extractive industries where continued sacrifice zones with already economically marginalized communities bear a disproportionate burdens is not only unacceptable from a justice perspective, but will fatally undermine the needed whole of society effort for climate action to meet the Paris Agreement goals.

Our current model for determining the fair share NDCs only takes the challenge of domestic inequality into account by treating differently, for each country, the survival emissions and incomes of the poor differently than the discretionary incomes enabling the consumption (and associated emissions) of the rich, when calculating responsibility and capacity. However we believe inequality, both international and domestic, is a pressing issue that must be addressed in order to effectively and justly act on climate change. In the future, we will much better incorporate national-level inequality data within our analysis, both to sharpen our fair share demands at the international level, and to support domestic campaigners demanding equity at the domestic level. We invite a discussion on this effort within civil society.



A worker tries to gather the oil with a shovel as they clean an oil spill that has polluted a beach of the Salamina Island, Greece. The tanker Agia Zoni sank with a cargo of 2,200 tons of fuel oil and 370 tons of marine gas oil. Oil spills result in immediate and long-term environmental damage that can last for decades. Oil spilled into the water, having been pushed by winds and currents, often reaches the shore. When an oil slick reaches a beach, oil coats and clings to every rock and grain of sand. Oil spills frequently kill birds, fish and marine mammals such as whales, dolphins, seals, sea otters and contaminate their food supply. Marine animals that eat fish, shrimps or other food exposed to an oil spill may be poisoned by oil and die or experience other problems. © Milos Bicanski / Climate Visuals

CONCLUSION AND POLICY RECOMMENDATIONS

Every analysis of the NDCs, including the technical report for the Global Stocktake and latest UNEP gap report, make it clear that the current levels of climate action promised in NDCs is woefully and persistently insufficient to meeting the Paris Agreement goals. However, countries are not equally responsible for this shortfall. In fact, our analysis makes clear that the mitigation pledges in the NDCs of most developing countries, even the major emitters, are much closer to their fair shares than those of high-income countries. Not only has domestic effort fallen short in these countries, but they have also been unable or unwilling to deliver meaningful levels of international support. Falling short in both aspects has greatly harmed the necessary international cooperation for needed climate action. Lower-income developing countries, some of whom already put forward NDCs beyond their fair share, not only aren't seeing rich developed countries work as hard at domestic mitigation, the promised climate finance has not been as widely available as expected or needed. Meanwhile, impacts are only worsening.

It is essential then that countries all submit fair share NDCs for 2030 and 2035. This will mean revising 2030 NDCs for most developed countries who are falling short. These revised NDCs must include the necessary domestic action and international support. Increasing the flow of climate finance is an urgent priority which will help unlock needed ambition for the next round of NDCs with 2035 targets. These new 2035 NDCs, which are expected by 2025, must be equitable and ambitious, with each country committing to do its fair share, both at home and via international support.

The outcomes of the first Global Stocktake - including the technical assessment and COP 28 decision should provide greater guidance on how to achieve this. Principally, this includes strengthened understanding on operationalising equity throughout the Paris Agreement. A successful and actionable GST must acknowledge fairness across all forward-looking conclusions - including in the context of NDCs, and in supporting transitions to low carbon economies. These elements must also address the many aspects of climate action in this critical decade, including shifting away from fossil fuel dependency, protecting and restoring ecosystems, international cooperation and support, as well as adaptation and loss and damage.

The 2035 NDCs should include plans for a rapid and equitable phase out of fossil fuel extraction. This was already explored in detail in our 2021 report and we are releasing a groundbreaking new report at

COP 28⁸ that will highlight how putting equity at the center of the global fossil fuel extraction phase out can give us clear guidance on the dates by which each fossil fuel extracting nation will have to end these activities and how wealthy countries must support the phase out of those countries that do not have the capacity to overcome phase out challenges on their own. Fossil fuels are the core cause of the climate crisis; in order to address it, the world has to stop using them and it has to stop digging them up. As such, the next round of NDCs should absolutely include the beginnings of fossil fuel phase out and just transition plans, both for fossil fuel use as well as extraction.

These plans cannot rely on false solutions or dangerous distractions. No approach or initiative (including financing) should be allowed to advance new social, environmental and equity disasters. Such approaches, including distant and hollow net-zero pledges, unproven and risky carbon capture and storage technologies, claims that fossil gas is a "transition fuel," geo-engineering and a host of other false and dangerous distractions must be avoided.

Just transitions are critical prerequisites to the phase out of fossil fuels. The challenge – and the opportunity – is to shift from today's world where boosting fossil supply is the reflexive response to energy price worries to one where "managed decline" is more than a glib phrase. Because if the term is to mean anything, it has to be planning and delivering a just and equitable – and thus politically sustainable – transition to a decarbonized future while containing energy prices and avoiding the myriad other terrifying disruptions that could result from a chaotic fossil phase out.

This coalition came together around the idea that climate action on the scale needed, meaning a rapid global transformation toward a carbon-free, resilient future, has to be based on equity. Otherwise the collective action necessary is not possible. This means all countries must be willing to do their fair share. Continued freeriding, particularly by wealthy people and the countries of the Global North, will profoundly endanger the international cooperation necessary. COP28 and more specifically the Global Stocktake, provides a key moment for a collective agreement to increase ambition. Without a change in direction coming out of the GST and feeding into the next round of NDCs, the Paris Agreement will be at risk.

FAIR SHARE DEMANDS

Deliver fair share NDCs, both updated NDCs for 2030 and the new NDCs for 2035, reflecting:

- 1. Fair share mitigation target**
- 2. International support, for countries whose fair share exceeds domestic potential**
- 3. Commitments to a fair, full, fast and equitable fossil fuel phaseout**
- 4. Commitments to a just transition**
- 5. No reliance on false solutions or dangerous distractions, which put communities at risk.**



Protesters carry a banner with the fair shares message during the September 2019 Climate Strike in New York City, United States. The September 2019 Global Climate Strike saw an estimate 6-7.6 million people participate in protests across 4,500 locations in 150 countries demanding fair and urgent climate action. Dr. Saleemul Huq (1952-2023) is shown holding the banner to the left. He will be missed. © Brandon Wu, ActionAid

ENDNOTES

1 <https://climateequityreference.org> and <https://calculator.climateequityreference.org>, respectively.

2 Our effort sharing methodology is more thoroughly explained in our previous reports, all of which are available at equityreview.org, especially in our 2015 report released at the Paris COP (<https://www.equityreview.org/report2015>).

3 The LED pathway (updated version for the IPCC 6th Assessment Report (AR6)) has a 74 % probability for a temperature increase of 1.5 °C or less in 2100 and a 88 % probability of never exceeding 2 °C. The LED pathway peaks at 1.59 °C or less (with 50 % probability) or 1.71 °C, or less (with 67 % probability), and has a 38 % probability of never exceeding 1.5 °C. This is one of the lower overshoot pathways presented in the AR6. As such, it makes what we consider reasonable assumptions about the amount of carbon dioxide sequestration through the LULUCF sector (e.g. reforestation) and does not rely on any sequestration through BECCS or other questionable technological approaches of carbon dioxide removal.

4 For Indonesia, the NDC document presents baseline emissions in 2030 of 2,154 MtCO₂eq (excl. LULUCF), which is nearly double its current (2022) emissions of 1,156 MtCO₂eq, baseline figures have remained unchanged from the previous version of the NDC, despite the substantial shifts brought on by the Covid-19 pandemic and its aftermath. Given Indonesia's total unconditional target of 19.2 % reduction (excluding LULUCF, or 31.89 % incl. LULUCF), the resulting emissions level after this 19.2 % reduction would still remain above the baseline used in this analysis, thus represent no mitigation relative to that baseline. India's case is similar, whose 30-35% economy-wide GHG-intensity-of-GDP improvement target remained unchanged since its 2015 INDC submission, and leads to no mitigation relative baseline when applied to baseline GDP figures updated after the Covid-19 pandemic.

5 Quantifications of Brazil's NDC that exclude LULUCF (like ours) are subject to a high degree of uncertainty due to Brazil's treatment of LULUCF in their NDC. Brazil expresses its NDC target as an economy-wide target (i.e. including LULUCF) but does not indicate how much of this economy-wide target it intends to achieve through LULUCF and how much in other sectors. Brazil selected the

year 2005 as the base year for its target, when LULUCF emissions were very high - representing nearly two-thirds of total Brazilian emissions. Hence, the analysis of the mitigation impact of Brazil's NDC in sectors other than LULUCF depends greatly on assumptions about the country's action (or inaction) in the LULUCF sector. The quantification here utilizes the most charitable interpretation (for non-LULUCF sectors) possible, namely that Brazil will not undertake any emission reduction efforts in the LULUCF sector beyond the Brazilian government's reference scenario for LULUCF, thus all mitigation efforts needed to implement its economy-wide NDC target would take place in non-LULUCF sectors. Were Brazil, on the other hand, to actually reduce deforestation below that reference level - which it should do, since deforestation is a very important source of emissions -, our fair shares assessment of the Brazilian NDC would become much less favourable. Brazil has announced plans to update its NDC, however it was not submitted to the UNFCCC in time for consideration here.

6 For full consistency with our overall fair shares approach, the calculation of the shortfall should also take into account the mitigation that was enabled across the world by wealthier countries' climate finance contributions. This report does not quantify these impacts, however, we did so in previous reports (e.g. <https://www.equityreview.org/report2019>) and found that in the very best case observed (Japan) climate finance closed only 5 % of the gap between fair share and domestic NDC pledge, with figures much smaller for the EU (3 %) and US (1 %). Thus, a calculation of the shortfall that took those impacts into account would yield a smaller overall number for these wealthy countries' cumulative shortfall, but only marginally smaller.

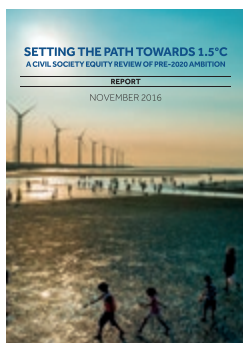
7 Just like the 2030 fair shares assessment, the Climate Equity Reference Calculator was used to calculate these 2035 results. As of this writing, the public version of the Calculator (<https://calculator.climateequityreference.org>) does not yet support outputs beyond 2030. To obtain 2035 fair shares results for countries not listed here, email the Calculator team at feedback@climateequityreference.org.

8 This report will become available at <https://equityreview.org> on December 5, 2023.

PREVIOUS REPORTS



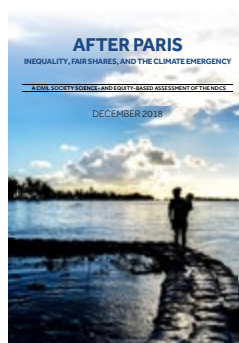
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Oil cars unload at the terminal in Saint John, New Brunswick, Canada. © Chris Toe Pher