







## **PLANETARY EMERGENCY 2.0**

Securing a New Deal for People, Nature and Climate



By The Club of Rome, in partnership with Potsdam Institute for Climate Impact Research



# THE PLANETARY EMERGENCY PLAN 2.0. UPDATED TO INCLUDE INSIGHTS FROM THE COVID-19 GLOBAL PANDEMIC. MAKES THE CASE THAT WE ARE UNEQUIVOCALLY IN THE MIDST OF A PLANETARY EMERGENCY. THE PLAN PROVIDES TEN COMMITMENTS TO PROTECT THE GLOBAL COMMONS AND PUBLIC GOODS COMPLEMENTED BY TEN ESSENTIAL TRANSFORMATIVE ACTIONS TO DRIVE SYSTEMS CHANGE AND STABILIZE THE EARTH.

## THE CASE FOR A PLANETARY EMERGENCY PLAN

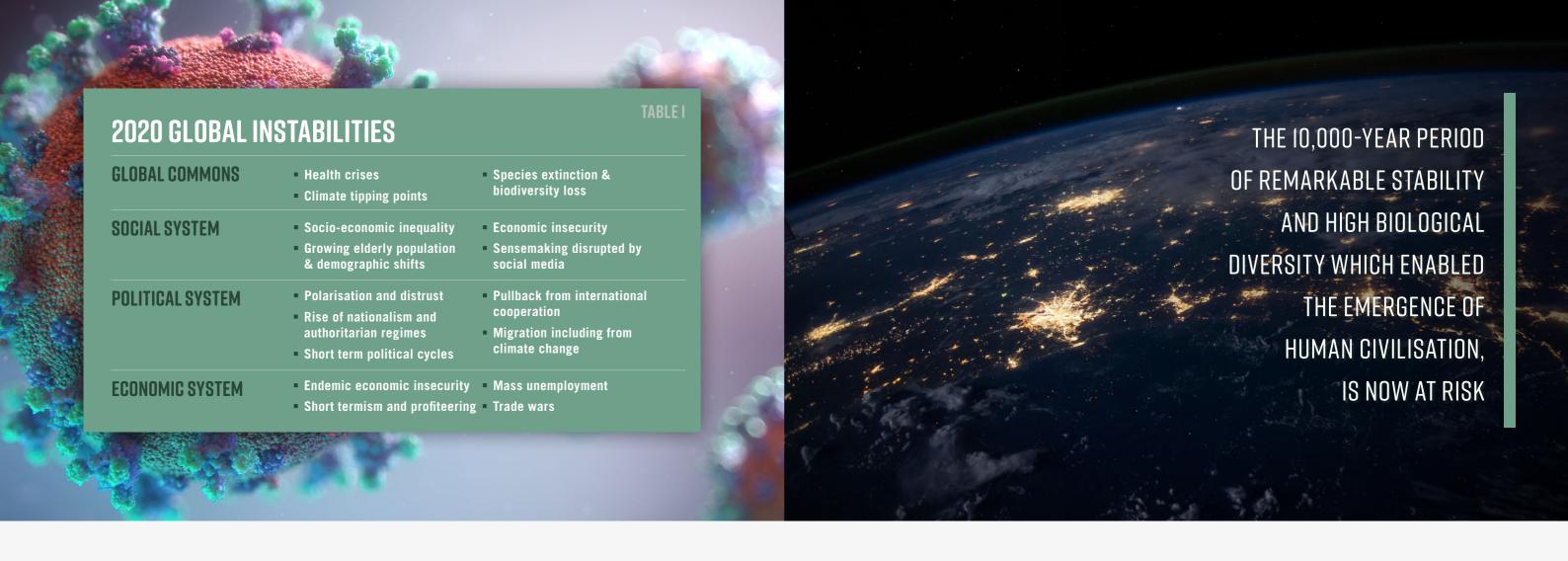


The Planetary Emergency Plan published in July 2019 called for the UN and governments to declare a Planetary Emergency and implement a plan of action to build a resilient future. Now, in 2020, COVID-19 is infecting millions of people around the world, and has claimed over 700,000 lives, with numbers rising. The virus continues to disrupt the global economy and financial markets and directly impacts people's lives and livelihoods across the globe. COVID-19 has exposed our vulnerabilities and has reinforced the case for emergency action. We live in an increasingly turbulent world (see table 1) with rising pressures on people and planet triggering extreme shocks, like disease outbreaks, droughts, floods and heatwaves. We are living beyond the carrying capacity of the planet, putting human systems on a collision course with natural systems of which we are a part. The pandemic is a manifestation of this fact, showing that the health of societies and the stability of economies are deeply connected to the health of our ecosystem.

COVID-19 is but one pandemic in a series of rising infectious disease outbreaks over the past decades, ranging from Ebola and Sars, to bird flu. All have been caused by virus spill-over from wildlife and domestic animals to humans, likely triggered by human degradation of natural ecosystems, and reinforced by high levels of global travel, wildlife trade and high-density living. Recovery from the pandemic offers us a transformative moment at a critical time for our species. Do we rebuild our economy with the same inequalities, fragilities, vulnerabilities and instabilities as before? Or do we build back a more resilient world able to deal with unavoidable shocks. Why would anyone accept a world where our economic security and long-term survival are at grave risk and our future is so uncertain?

This is a critical decade for humanity. For 10,000 years, human civilisation has grown and thrived because of Earth's remarkable regenerative capacity that sustains climate stability and rich biological diversity. In the last 50 years, human activity has severely undermined this resilience. Our patterns of economic growth, development, production and consumption are pushing the Earth's life-support systems beyond their natural boundaries. The stability of these systems – our global commons on which we so fundamentally depend – is now at risk. Our actions in the coming decade will influence the trajectory of our planet and our future survival. It is not possible to bank on another 10,000 years of human development if we continue to destroy the ground upon which our civilisation has been built – a rich, diverse, functioning biosphere. The stakes really are this high.

https://gisanddata.maps.arcgis.com apps/opsdashboard/index.html#/ bda7594740fd40299423467b48e9ec





## **A CRITICAL 12 MONTHS**

The COVID-19 pandemic has shocked the world and brought immense suffering and economic chaos. This was avoidable. More than 50 years ago prominent economic and scientific experts predicted in the "Limits to Growth" report to The Club of Rome that humanity's search for continuous inequitable growth at the expense of natural ecosystems and resource use would create not one singular crisis, but a convergence of crises such as we are seeing today. We cannot allow another 50 years to pass before acting nor allow another avoidable crisis to occur. COVID-19 has highlighted our collective fragility and the profound interdependent links between disease, ecosystems loss, climate and emissions, prosperity, equity and justice. Like previous shocks of this magnitude—the Great Depression and the Spanish Flu—this is a transformative moment where societies pull together in the face of multiple shocks and act collectively to protect and provide for all in society.

A different world, a different economy is feasible, desirable and necessary. We have the tools to design resilience to future crises rather than simply react to disaster. But we need political will and joined-up leadership. This is an unprecedented opportunity to move away from unmitigated growth at all costs and deliver a lasting shift to a development pathway that promotes healthy people, planet and prosperity for all.



## A DECADE OF ACTION

2020 marks the beginning of the most rapid economic transformation in history. Together we must make 2020 the start of a successful Decade of Action. To achieve our Paris Agreement goals and prepare for future pandemics, we must redesign our governments, economic and financial systems in service of people and planet.

2020 is also a year of remembrance, as we mark the 75<sup>th</sup> anniversary of the United Nations. This is the moment to embrace the importance of collaboration and solidarity between nations as we reflect on the global impact of one of the greatest pandemics ever seen. It is the time for transformation and the co-creation of solutions and leadership. The United Nations has stewarded societies through an unprecedented period of peace through economic cooperation. Now, as we face an even greater challenge, we must all become effective stewards of the global commons and promote access to desperately needed basic essentials (food, water, health care etc.) in order to ensure resilience to future health and environmental crises and deliver more equitable prosperity for all. It is through collective national, regional and local action that decision makers, united with citizens, can "build back better "and ensure a more just existence for communities across the globe.

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## EMERGING FROM EMERGENCY



COVID-19 has directly influenced our lives and livelihoods. The convergence of this pandemic with the climate and biodiversity tipping points has created the greatest existential risk to society. Each 1°C rise in temperature places an additional one billion people beyond humanity's "climate niche" and the survival of all species. This decade will be a turning point – the moment when the world bends the curve, averts impending disasters and opts instead for a transformative pathway by design, not by disaster. The opportunities not just to avert disaster, but to rebuild, improve and regenerate are readily available. History has shown that humanity is remarkably resilient. We are well-adapted to respond to disaster through our greatest gifts: cooperation and innovation. But we have a narrow window to act now to reduce risk or avoid catastrophe.

Declaring a **Planetary Emergency** provides a new compass for nations and injects the essential urgency into decision-making. It will ensure that all action from 2020 will be taken in consideration through its impact on the stability of Earth's life-support systems, and be underpinned by the social and economic transformations needed to secure the long-term health and well-being of people and planet. By doing so, we can finally ensure that we collectively promote social progress and better standards of life as asked for in 1945 when the United Nations was born.

Yet while our efforts should be global, our responses must also be national and local. They should be tailored to local needs, resources and cultures to ensure they have maximum impact and work to everyone's advantage.

Our aim is to protect the Global Commons through 10 clear commitments, and ensure they are met by immediately implementing a set of transformational policy and market levers nationally and locally. This is our insurance policy to emerge from emergency and guarantee a just transition for all.

The commitments and actions in this report are set out in the context of emergency action. In essence it means the suspension of business-as-usual at all levels of society and across corporate and political decision making. Together we must do whatever it takes to resolve this planetary crisis, adopting different risk management approaches, more appropriate governance systems and new economic models focused on wellbeing. The initiatives below must progress as fast as possible, subject to unavoidable pandemic constraints. There is no higher priority. We must immediately implement the commitments and actions in this report recognising that long-term human progress and prosperity across North and South is more important than the short-term economic interests of but a few.

We invite nations to both declare a Planetary Emergency and adopt a **Planetary Emergency Plan** with the well-being of all people firmly anchored at its core. We propose that such a plan be founded on the urgent need to at least halve greenhouse gas emissions by 2030, to reach carbon-neutrality long before 2050, while halting biodiversity loss and protecting the global commons and human health.

We believe that we can **emerge from emergency** into a world which benefits all species, within planetary boundaries and leaving no one behind. This is the world we envisage, the world to which we must all aspire where healthy people live on a healthy planet in symbiosis.



<sup>&</sup>lt;sup>2</sup> For example, read more about the work on wellbeing indicators by the Wellbeing Economy Alliance (WEAII) or the work of Kate Raworth on doughnut economics: https://www.kateraworth.com/doughnut/

### 10 COMMITMENTS FOR OUR GLOBAL COMMONS AND PUBLIC GOODS



- l. By 2030, declare critical ecosystems as Global **Commons and protected areas** – essential to the functioning of a stable planet and through a regime of stewardship and responsibility of all to manage sustainably. Recognising the critical role of nature as carbon stocks and the importance of nature-based solutions,<sup>3</sup> and ensuring proper compensation for those countries, regions, communities most impacted.4
- Set a universal global moratorium on deforestation by **2025**, using a net-zero deforestation and degradation metric, and tripling annual investments in forest conservation and forest landscape restoration. Relatedly, halt all investments driving continued deforestation.unsustainable land-use and change of intact and irreplaceable ecosystems, and shift such investments to natural capital protection, regenerative land use practices and just transition funds for communities most impacted.
- 3. Sign a moratorium on the exploration and exploitation of Arctic oil and gas reserves, supporting withdrawal from fossil energy exploration and use and establishing a Cryosphere Preservation **Plan** to protect this critical ecosystem.
- Halt the decline of critical and vulnerable ocean ecosystems and habitats and secure a robust New **Ocean Treaty** (under UNCLOS) for the protection and sustainable use of biodiversity in areas beyond national jurisdiction, including moratorium on deep sea mining.
- 5. By 2025, halt all conversion of wetlands, grasslands and savannahs for the production of agricultural commodities and triple annual investments in their effective protection, restoration and resilience.

<sup>3</sup> For more information about the importance of nature-based solutions, see for example:

4 https://www.thelancet.com/pdfs/iournals/lancet/PIIS0140-6736(15)60901-1.pdf;

- 6. Ramp up investment to provide essential public goods such as access to access to healthcare, as well as global and national services including but not limited to disease surveillance, knowledge exchange and information dissemination, market oversight, pollution reduction, and pandemic response.5
- Boost public and private finance flows for restoration of critical ecosystems, including the mobilisation of \$200billion for the Green Climate Fund and Global Environment Facility over the next decade.
- 8. Launch a permanent public-private Planetary Emergency fund for the global commons by the end of 2020, building upon the G7 Amazon Emergency Fund and committing the necessary capital to insure humanity against present and inevitable future crises.
- 9. Introduce policy instruments and financial instruments similar to a "just transition fund" by the end of 2020 to support communities dependent on the global commons including local farmers, foresters, wildlife conservation and indigenous people to secure their livelihoods, enhance resilience to future pandemics and to shift to regenerative agriculture, sustainable forestry and other sustainable land-use practices.
- 10. By 2025, require all large publicly-listed and familyowned companies, cities and national governments to commit to science based targets for the global **commons** (climate mitigation and adaptation as well as ecosystems protections and regeneration), disclose environmental impact, account for natural capital, and value nature on their balance sheets.

- 6 https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(15)60901-1.pdf
- <sup>7</sup> https://www.climatechangenews.com/2019/08/08/un-science-report-shows-time-reboot-relationship-nature/
- 8 https://www.wri.org/blog/2018/09/safeguarding-carbon-stored-indigenous-and-community-lands-essential-
- 9 The authors of this report do not support GDP as an accurate measure of economic development and propose shifting to economic well-being progress indicators that have socio-economic and human health at its heart, as set out in action 1

### **10 URGENT ACTIONS** FOR THE TRANSFORMATION



#### **CREATING JUST & EQUITABLE SOCIETIES**

- I. Introduce economic progress indicators that include socio-ecological, human health and well**being by 2030**, recognising that the latter depends on the stewardship of natural ecosystems and supporting the world's most vulnerable.6
- Revolutionise taxation for the 21st C. Cost negative environmental and social externalities. Tax what we don't want: inequality, carbon, land-water-air pollution, over consumption of resources and unhealthy food and beverages. Don't Tax or Reduce taxation on positive economic activities and behaviour: labour, low carbon emissions, healthy ecosystems, nature based solutions, circular and regenerative processes. More specifically address deep social inequalities in the distribution of wealth and prosperity across North and South by introducing wealth taxes and effective international tax systems for multinational corporations.
- 3. By the end of 2020, ensure access to health services, education and employment programmes fostering transformative learning and innovation, reskilling and retraining of displaced workers and youth to increase the resilience of future generations to economic, health and ecological shocks post-COVID-19. Specifically ensure that girls and women have equal access to all health services, education and employment programmes.
- Co-create legal and funding mechanisms that allow all indigenous communities to secure their rights to land, food, water, indigenous knowledge systems and legal aid, as well as essential services such as health care. As stewards of these lands in mitigating climate change and ecosystem degradation and due to their vulnerability to global health crises and environmental crises, ensure inclusion of indigenous people and first nations in the drafting of policy, legal and financial mechanisms which not only protect but also advance the voice of all indigenous communities in the public sphere. Such mechanisms must include funding and legal aid to guarantee that these communities have access to justice.78

#### TRANSFORMING ENERGY SYSTEMS

5. Stop fossil fuel expansion, production and use by halting subsidies and shifting revenues and investments to low-carbon energy deployment. This includes setting end-dates for fossil-fuel based infrastructure, mobility and electricity generation aligned with scientific assessments of necessity and climate neutrality goals.

- 6. Continue the doubling of wind and solar capacity every four years by tripling annual investments and allocate at least 1% of GDP9 in research, development and innovation in renewable energy, energy efficiency, and low-carbon technologies including green hydrogen for high-emitting sectors before 2025.
- Set a global floor price on carbon, to at least >30 **USD/tonne CO**.. which internalises carbon energy externalities in all products and services. Start immediately for developed countries and no later than 2025 for the most advanced transition economies, alongside a binding agreement that appropriately compensates those economies most dependant on high carbon energy and production.

#### SHIFTING TO A CIRCULAR & REGENERATIVE ECONOMY

- 8. Immediately agree to halve consumption and production footprints in developed and emerging economies and close loops in inefficient industrial, energy and agricultural value chains and production processes by 2030 by internalising externalities, enhancing regenerative land use, halting unsustainable natural resource exploitation including rare earths/minerals, in recognition of the social and ecological impact from the worldwide use of resources for industry 4.0, food production and the energy system transformation.
- Internalise externalities in unsustainable and high-carbon production and consumption through targeted consumption taxes and regulation, as well as consumption-based accounting, by 2025.
- 10. Develop for all countries national and crossnational roadmaps that adopt regenerative land use, well-being, low-carbon and circular economic indicators, dramatically reducing the human material and carbon footprint to net-zero and transforming all carbon-intensive sectors into 'nature positive' industries by 2030.

THE MANNER AND PRIORITY IN WHICH THESE ACTIONS ARE IMPLEMENTED WILL VARY FROM COUNTRY TO COUNTRY, BUT THE OVERALL OBJECTIVE OF RAPID CARBON EMISSIONS REDUCTION, NATURE REGENERATION. AND ENHANCING HUMAN HEALTH AND WELL-BEING SHOULD BE A COMMON GOAL OVER THE NEXT DECADE.

https://www.wri.org/blog/2018/09/safeguarding-carbon-stored-indigenous-and-community-lands-essential-

 $^{5}\ \underline{\text{https://www.climatechangenews.com/2019/08/08/un-science-report-shows-time-reboot-relationship-nature/;}$ 

pdf?sequence=1&isAllowed=y; https://weforum.ent.box.com/s/9fu6u76jbixddc3nw9zr7u0fnhy1as52;

https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions;

and https://nature4climate.org/nature-positive-recovery/.

## THE RATIONALE FOR EMERGENCY ACTION

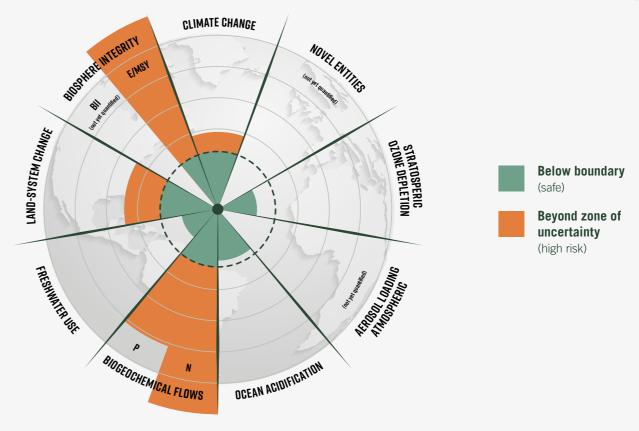


We face a planetary emergency. The definition of an emergency is a dangerous event requiring immediate action to reduce risk of potentially catastrophic results. This is not just about climate. We face the combined threats of climate, nature loss and human health pandemics. Of the nine planetary boundaries that keep Earth in a relatively stable state, four are under enormous pressure from humanity and showing signs of extreme stress (see diagram 1). Humanity has altered the carbon cycle, the nitrogen cycle and the water cycle; caused ocean acidification; punched a hole in the ozone layer and sparked an ecological crisis.

The science is clear: climate, biodiversity and human health are fully integrated and interdependent. Every year since the Industrial Revolution, land and ocean ecosystems have absorbed close to half of all emissions from fossil-fuel burning (see diagram 2). Without nature's ability to absorb and store our greenhouse gas emissions, we would have already exceeded 2°C of warming, with potentially disastrous consequences. Breaching this threshold, combined with ecosystem collapse, could push the planet towards an irreversible and catastrophic trajectory for humanity.

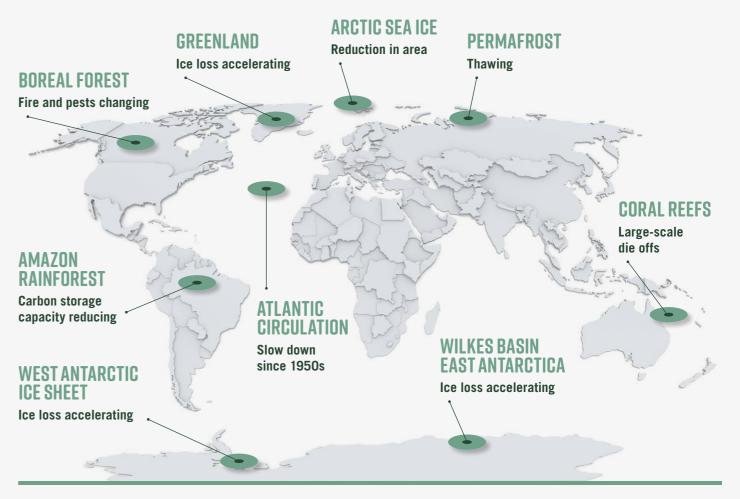
When climate change alters key natural processes, it can set off a chain reaction destabilising essential planetary systems. Increasing droughts, for instance, are reducing the ability of tropical forests to store carbon, making them more prone to fires, releasing yet more greenhouse gas emissions. In 2020, researchers showed that the Amazon is losing its ability to store carbon and could become a major emitter of carbon as early as 2035. The colossal ice loss in the Arctic has reduced the albedo capacity of key Earth systems to reflect heat away from the planet. This is why we are seeing record temperatures north of the Arctic Circle. In June 2020, parts of Siberia reached  $38^{\circ}$ C ( $100^{\circ}$ F). The higher the temperature, the more permafrost thaws, with greater emissions of both  $CO_2$  and methane, leading to even greater warming and triggering further negative feedback loops.

Biodiversity loss is reaching mass extinction rates. At least one million of eight million identified species risk disappearance, many within decades. Food chains are already impacted, vital ecosystems are collapsing and the risk of pandemics is increasing. Species diversity and ecosystems integrity play a fundamental role in regulating the climate, water cycles, carbon sequestration, food production and human health protection. The COVID pandemic has shown even more clearly our dependency on food security, access to water and proper health services. Even though it is difficult to shift a full world of 9billion inhabitants today, we have no choice but to come back to a safe operating space within our planetary boundaries.



#### DIAGRAM 2

#### TIPPING POINTS AND PLANETARY BOUNDARIES



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https://www.ipbes.net/globalassessment-report-biodiversity-



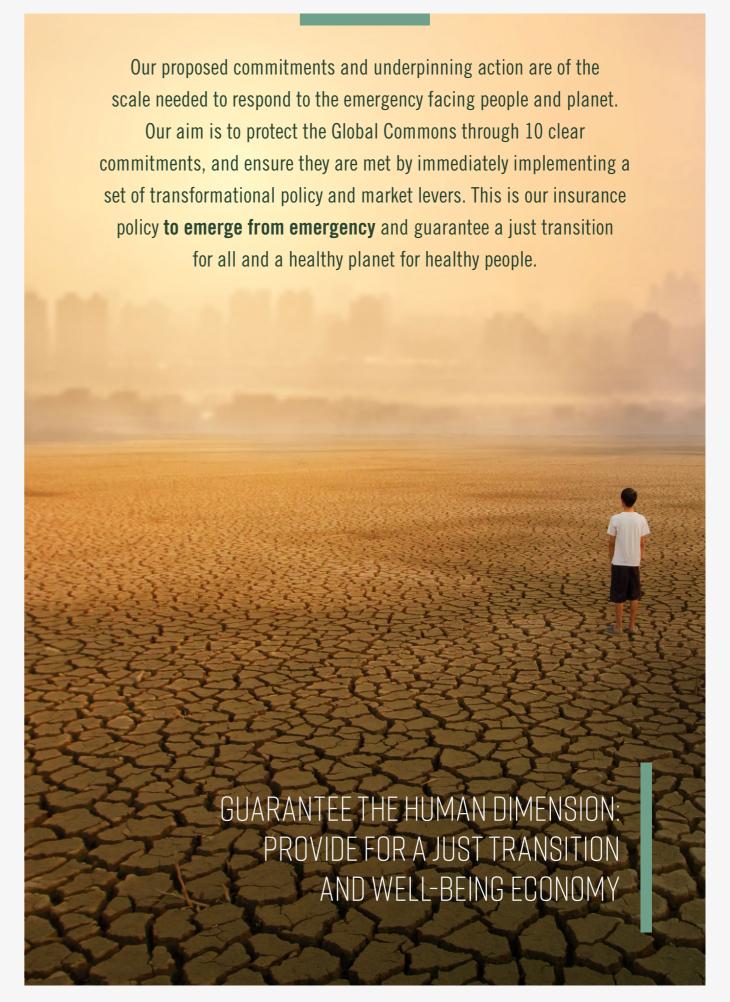


Fundamental changes to the environment threaten to undermine the progress we have made in health and life expectancy. More heat stress coupled with air pollution, for example, reduces labour productivity and causes more deaths, particularly in mid- and low-latitude regions. Fires from intentional burning in agriculture spread to neighbouring farms and forests, damaging soil carbon capacity and productivity. Declining crop yields in tropical and sub-tropical regions will increase undernutrition for many millions, stunting children's growth. On top of this, land-use changes, pollution and temperature rise are causing more infectious (vector-borne) diseases.

Outbreaks of zoonotic and other infectious diseases such as Ebola, Sars, bird flu and now COVID-19, caused by a novel coronavirus, are on the rise and this is only the tip of the iceberg. Without harmony between humanity and nature, zoonotic diseases such as COVID-19 will continue to thrive. Breaching this threshold of warming will push the planet towards irreversible and catastrophic biosphere feedbacks and greater human health consequences.<sup>11</sup>

Current economic assessments of planetary changes are deeply concerning and global economic and societal risks of accelerated planetary pressure are unimaginable. Yet, we know that the costs of action are far lower than the costs of inaction. The tools we need to respond boldly to the Planetary Emergency are readily available, and they will reap significant societal and economic benefits. The IPCC Special Report on 1.5°C (SR 1.5) tells us that remaining at or below 1.5°C remains physically, technically and economically within our reach if we act at sufficient speed. Yet, the carbon budget, which provides us a two-in-three chance of meeting this goal, runs out in seven years and four months (from August 2020).<sup>12</sup>

We do not know how to reconstruct the ice sheets and Arctic sea ice, the hydrological cycle, the rainforests, coral reefs and all other life-support systems on Earth. The tipping points included in the diagram on the previous page represent a fraction of the damage caused to our natural environment. If we wait for the emergency to fully manifest itself, it will simply be too late to reverse the breakdown of human and natural systems and ensuing health crises it will have caused. We now have the opportunity to transform by design rather than through disaster, so let us do so. A stable, resilient and prosporous future for people and planet—the most desirable future for all—remains within our grasp. Yet, our window of opportunity is narrow and time is running out. We need to acknowledge that this is a planetary emergency today and ensure that we immediately put in place the commitments and actions needed to emerge from emergency.



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<sup>&</sup>quot;Future of Human Climate
Niche https://www.pnas.org/
content/117/21/11350; Climate
tipping points — too risky to bet
against https://www.nature.com/

https://www.mcc-berlin.net/ fileadmin/data/clock/carbon clock.htm

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The Planetary Emergency Plan is supported by the planetary emergency partnership a network of 220 national and international organisations calling for governments and the UN to declare both a planetary emergency and adopt a plan of action. The partnership began in 2019 with the Club of Rome, Potsdam Institute for Climate Impact Research and WWF. Since 2020, and the global health pandemic, the network has grown substantially.

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ENSURE ACCESS TO HEALTH SERVICES, EDUCATION AND EMPLOYMENT PROGRAMMES, FOSTERING TRANSFORMATIVE LEARNING AND INNOVATION, TO RESKILL AND RETRAIN DISPLACED WORKERS AND YOUTH IN ORDER TO INCREASE THE RESILIENCE OF FUTURE GENERATIONS.



OUR AIM IS TO PROTECT THE GLOBAL COMMONS THROUGH
IO CLEAR COMMITMENTS, AND ENSURE THEY ARE MET BY
IMMEDIATELY IMPLEMENTING A SET OF TRANSFORMATIONAL
POLICY AND MARKET LEVERS NATIONALLY AND LOCALLY. THIS
IS OUR INSURANCE POLICY TO EMERGE FROM EMERGENCY
AND GUARANTEE A JUST TRANSITION FOR ALL.





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