THE COHORT 2040 CHALLENGE

HOW CAN FUTURE LEADERS BE
BETTER PREPARED FOR A FUTURE OF
WORSENING ENVIRONMENTAL CRISIS
AND DESTABILISATION OF SOCIETIES?

FRAMING PAPER

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January 2022



Institute for Public Policy Research

ABOUT THIS PAPER

This report is the first output of Cohort 2040, a project seeking to better understand the challenge facing emerging leaders of the Millennial generation and to build a community that helps these leaders more effectively continue the struggle for a better world as environmental destabilisation grows.

You can learn more about Cohort 2040 by visiting https://www.cohort2040.org.

This report meets IPPR's educational objectives by reviewing the growing challenge for future leaders resulting from environmental harm. It also supports our objectives on advancing environmental protection and improving sustainable development by exploring options for improved preparation of future leaders to better promote these ends under worsening conditions.

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ACKNOWLEDGEMENTS

The author would like to thank James Dyke, Peter Lipman, Asher Miller, Luke Murphy, Harry Quilter-Pinner, and Carys Roberts – and the V. Kann Rasmussen Foundation, whose support made this paper possible.

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Citation

If you are using this document in your own writing, our preferred citation is: Laybourn-Langton L (2022) The cohort 2040 challenge: How can future leaders be better prepared for a future of worsening environmental crisis and destabilisation of societies?, IPPR. http://www.ippr.org/research/publications/the-cohort-2040-challenge

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SUMMARY

Historical efforts to slow the environmental crisis and adapt to its inevitable impacts have been insufficient. The consequences of the crisis – such as extreme heat and its knock-on effects for health and economic stability – are growing. The continued failure to realise rapid, transformational action means these effects will get worse.

This briefing paper explores the potentially severe challenge for future leaders. It focuses on the generation who are currently around their early- to mid-30s and already emerging as leaders. This generation are around the median age of the global population and are half the average age of current world leaders (62). Therefore, they could be leading in the 2040s and 2050s.

A continued failure to act on the environmental crisis means these **leaders will inherit three increasingly severe burdens**, all of which are already significant for current leaders:

- **mitigation:** overcoming political barriers and delivering transformational change to realise rapid reductions in emissions and the destruction of nature
- removals and restoration: sucking increasingly large quantities of emissions from the atmosphere and restoring damaged ecosystems
- adaptation: ensuring resilience in the face of worsening environmental shocks.

The ability of future leaders to overcome these burdens could be increasingly undermined by:

- the accelerating destabilisation of nature, from increasingly severe extreme events, such as heat and drought, to growing non-linear changes in environmental systems
- the cascading consequences for societies, including severe impacts in terms
 of food security, poverty, economic stability and conflict.

In sum, the confluence of these factors could create a critical 'crunch point' for future leaders where the ability to overcome a set of inherited burdens is undermined by worsening environmental impacts and the destabilisation of societies. This 'cohort 2040 challenge' could present an unprecedented challenge for future leaders in decades to come.

A failure to adequately respond to this challenge could lead to runaway, catastrophic changes to the environment. Alternatively, increasing the pace of transformational change to sufficiently sustainable, equitable and resilient societies under worsening conditions could ensure the world navigates through the crunch point.

Future leaders should better anticipate and be prepared to face this challenge – the focus of an ongoing project that this briefing paper introduces.

1. INTRODUCTION: INTO THE STORM

Imagine the world's countries as a flotilla of ships on a calm sea. Far on the horizon is a vast and destructive storm towards which the flotilla heads. For some time, the ships' passengers have called for a change in course to avoid a future disaster. Some ships are already close to the storm and are feeling its effects. But despite a small change in course, the ships continue to accelerate into the storm.

There are similarities between this story and many mainstream environmental narratives over the last few decades. Sufficient warning was supposed to give way to effective incremental change. But adequate action to arrest the environmental crisis was not taken. The natural world is now being critically destabilised, at levels from the local to the global: average temperatures have increased by 1.2C, an eighth of species are at risk of extinction and the nitrogen cycle is being critically disrupted. We are well into the storm and heading deeper.

Stuck in a storm, it is imperative to steer out, or the ships will be overcome. Yet doing so is made harder by the simultaneous challenge of managing the chaos brought by the storm itself. Attention is diverted by fear and sickness, a hole in the hull and the crews of other ships grasping for their lifeboats, and abandoning others to the storm – all of which could overwhelm the collective effort to plot a new course and to steer out of the storm. Societies across the world are already experiencing the severe burden of the extreme events and slow-onset effects resulting from the worsening environmental crisis. These fall unequally and exacerbate existing social, economic and political problems. If action continues to be inadequate, we will head further into the storm and its subsequent effects will be far worse: a vicious cycle.

The coming decades present an unprecedented challenge. All societies and economic systems must be rapidly transformed to restore the natural world. But they must do this while contending with worsening environmental change and the resultant destabilisation of societies. In the extreme, navigating this complex, unprecedented reality could be too much, eroding our ability to stop runaway changes in the natural world, which risks catastrophic changes to Earth's life support systems.

Many scientists, experts and communities on the front line are warning of this worsening outlook. But these warnings are often treated as projections of a future that can be definitively avoided; and as interventions tactically deployed to spur action in the present. This is particularly the case when they are expressed in intergenerational terms: "Act now to save our children's future." But what if these warnings increasingly indicate the future conditions under which the struggle to overcome the environmental crisis will be fought?

Less attention has been paid to another intergenerational perspective: What burden is being placed on the shoulders of future decision-makers by a far more environmentally destabilised world – and how can they be better prepared? The average age of world leaders is 62, dropping to the early 50s across Europe (Asrar 2021); many parliaments have an average age in the high 50s (Watson 2020, CRS 2021). Emerging millennial-age leaders in their early 30s – the median age of the global population is 31 years (CIA 2021) – will reach the age range of contemporary leaders in the 2040s and 2050s. If the inadequate action of today continues, theirs could be a tomorrow of 2C of heating, severe and persistent environmental shocks, and the knock-on destabilisation of societies across the world.

This briefing paper explores the challenge facing future leaders from the worsening environmental crisis: the 'cohort 2040 challenge'. It starts by

considering the inherited burdens for future leaders that result from the historical failure to adequately mitigate and adapt. It explores the compounding and complex consequences of the environmental crisis and how these could undermine efforts to reduce emissions and restore nature. It finishes by discussing what emerging leaders in younger generations could do to be better prepared – and announces a project that seeks to further such an agenda, of which this is the first output.

2. THE INHERITED BURDENS

Timely and sufficient global action to stop the environmental crisis has not occurred. This has created three increasingly severe burdens for policymakers:

- **to stop worsening the problem**, by rapidly reducing emissions and the destruction of nature
- · to heal, by removing emissions from the atmosphere and restoring nature
- to adapt, to ensure societies are more resilient to the inevitable and growing consequences of the crisis.

These burdens are already significant for current leaders. They will become even more severe for future leaders, as current environmental commitments and action are grossly insufficient.

STOPPING: THE MITIGATION BURDEN

If global emissions had peaked in 2000, a 3 per cent annual fall would have been enough for temperatures to stay below 1.5C (Hausfather 2021). Yet yearly emissions have increased by a third since then, and global emissions in 2021 are expected to be close to 2019's record level (Friedlingstein et al 2021, UNEP 2021a). Current global commitments would, if delivered, reduce emissions in 2030 by around a fifth from 2010 levels; yet a 55 per cent reduction is needed to have a two-thirds chance of staying below the 1.5C target (UNEP 2021a). Net zero is needed by around 2050. Elsewhere, every single global target to limit biodiversity by 2020 was missed (CBD 2020). In general, targets and commitments for slowing the environmental crisis are not matched by credible short- and longer-term plans to accelerate the deployment of cleaner technologies and to transform societies (Atwoli et al 2021).

Realising mitigation trajectories that are sufficient to meet the 1.5C target and halt the wider destruction of nature requires a range of actions to rapidly shift societies and economic systems, including (Laybourn-Langton et al 2020):

- the development and mass rollout of clean technologies
- protection to stop the exploitation of people and nature during the production of clean technologies
- regulation and government intervention
- vast public as well as private investment
- support to help disadvantaged communities make the transition
- behaviour change towards sustainable and healthier lifestyles.

In turn, enabling these actions requires political struggle, marginalising counterproductive power imbalances and vested interests, and overcoming ideological and organisational inertias. All these factors make up the overall mitigation burden.

HEALING: THE REMOVALS AND RESTORATION BURDEN

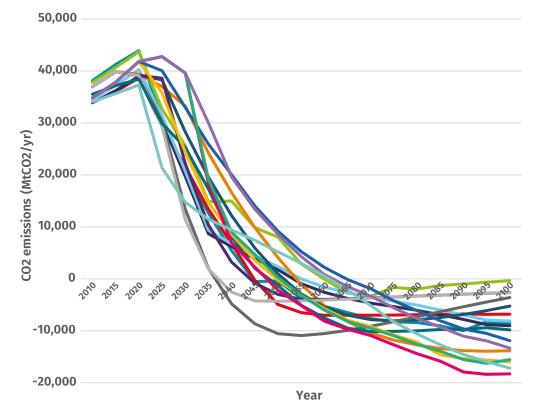
Many net-zero targets assume vast increases in our capability to remove emissions from the atmosphere. These include emissions that enter the atmosphere in excess of the overall budget allowed to stay below 1.5C, as well as any leftover emissions at the point net zero is achieved. The failure of high-emitting countries to reduce emissions means some removals are now inevitable and all the main scenarios for keeping heating below 2C in the most recent report from the Intergovernmental Panel on Climate Change (IPCC) require large-scale removals (IPCC 2021, Quiggin 2021). Previous IPCC scenarios put removals at 1.5 gigatonnes of carbon dioxide (GtCO2) per year by 2050 or more than 20 GtCO2 per year from 2060 under higher emissions (Quiggin 2021). In comparison, current yearly emissions are around 36 GtCO2.

If the failure to rapidly reduce emissions continues, negative emissions capabilities will need to be rapidly developed, deployed and financed up to and beyond 2040 (see figure 2.1). Yet credible means of realising this level of removals do not currently exist, in terms of both the maturity of technologies and the feasibility and environmental and equity impacts of deploying vast bioenergy projects (Anderson and Peters 2016, Quiggin 2021). A similar, interrelated burden exists for the restoration of biodiversity, land and soils, and the wider natural world, which have been pushed beyond safe levels of degradation (Future Earth et al 2021, Pörtner et al 2021).

FIGURE 2.1

Slower emissions reductions today mean that future leaders may have to realise vast negative emissions capabilities

Metric tons of CO2 (MtCO2) emissions per year between 2010 and 2100 across a range of different IPCC scenarios of limiting global temperature rises to 1.5C by 2100



Source: Huppmann et al, 'IAMC 1.5°C Scenario Explorer and Data hosted by IIASA' (Huppmann et al 2018) and author's calculations

ADAPTING: THE RESILIENCE BURDEN

The costs of preparing for and responding to worsening environmental shocks are already high (UNEP 2021c). Some African nations are spending nearly 10 per cent of Gross Domestic Product (GDP) on adaptation (UNECA 2017, AMFPED 2021). Annual adaptation costs in developing countries alone are estimated at \$70 billion (UNEP 2021c). This figure is expected to reach between \$140 billion and \$300 billion in 2030 and between \$280 billion and \$500 billion in 2050 (ibid). Adaptation extends beyond improving the resilience of infrastructure to climate shocks and includes public health, food systems, financial markets, political stability and security and defence (Laybourn-Langton et al 2020, Atwoli et al 2021, Brock et al 2021).

Overall, the latest United Nations Environment Programme (UNEP) Adaptation Gap report has concluded that the scale of adaptation progress is insufficient and that adaptation costs are likely to increase faster than adaptation financing (UNEP 2021c). Even wealthy nations that are as yet relatively sheltered from worsening impacts are taking insufficient action. This includes the UK, where the Climate Change Committee has concluded that the government has not taken sufficient action to ensure adaptation for 2C of heating, let alone plausible scenarios of 4C (CCC 2021).

3. THE ACCELERATING DESTABILISATION OF NATURE AND SOCIETIES

Overcoming the three inherited burdens would itself be an unprecedented challenge for the cohort of leaders in the 2040s and 2050s. But these leaders will also have to contend with two pressures that directly result from the worsening environmental crisis, which, together, could undermine efforts to overcome the burdens.

THE ACCELERATING DESTABILISATION OF NATURE

The destructive consequences of rising temperatures, biodiversity loss and other environmental destabilisation are becoming increasingly severe (IPBES 2019, IPCC 2021, WMO 2021). These include extreme heat and other severe weather, ice loss, sea-level rise, water scarcity, air pollution, increased ecosystem vulnerability and exposure, and the acidification of oceans. Recent megafires indicate that some regions are entering a "new age of intensifying extreme fire" (Future Earth et al 2021).

These increasingly severe impacts have knock-on effects, such as the loss of tree cover from fires increasing the vulnerability of places to flooding and landslides, such as in Canada this year (Austen and Isai 2021), or the accelerating melting of Arctic ice, which reduces the amount of heat reflected into space and therefore exacerbates temperature rises. The continued failure to realise rapid emissions reductions and to restore nature means that destabilisation of the natural world will get worse.

Overall, the environmental crisis is now so severe that these non-linear changes are becoming increasingly likely (Lenton et al 2019). The risk of some tipping points being triggered – sudden moments of rapid, irreversible change – is now thought to increase markedly between 1.5C and 2C of heating, temperatures lower than previously thought (Future Earth et al 2021). Large parts of nature are starting to show signs that tipping points could be close, such as in the Amazon, where deforestation, rising temperatures and fires risk a collapse of the rainforest (ibid, Qin et al 2021).

Furthermore, a rapid change in one part of nature can have cascading impacts on others, such as in the case of the weakening of the Atlantic Ocean circulation, the collapse of which would severely impact weather and temperature patterns globally, with potentially catastrophic consequences for food production and biodiversity (Future Earth et al 2021, OECD 2021).

THE CASCADING CONSEQUENCES FOR SOCIETIES

The consequences for societies of the accelerating destabilisation of nature are not just the direct impacts of discrete events, such as the destruction of crops caused by extreme weather events (OECD 2021, Quiggin et al 2021a). These events also lead to indirect effects, such as the destruction of crops leading to ongoing problems with nutrition and other public health issues and the enduring social and economic impacts of lost livelihoods (Quiggin et al 2021a).

More 'systemic' effects that ripple through interconnected social and economic systems are also possible, such as crop loss leading to higher food prices, which cascade through globalised markets and interact and amplify problems far afield, such as poverty, conflict and economic instability (UNDRR 2019, OECD 2021, Quiggin et al 2021a). These systemic effects can be severe and have global repercussions.

They may already be apparent, such as in the case of an increase in food prices in 2010/11, where extreme heat in Ukraine and Russia led wheat yields to fall by around a third (Quiggin et al 2021b). Russia banned exports to maintain domestic food supplies, which, alongside poor policy responses from other nations, led to rapid price inflation on global markets. This in turn had knock-on effects across the world and particularly for less wealthy and stable countries that were already struggling to meet the nutritional needs of their people (ibid).

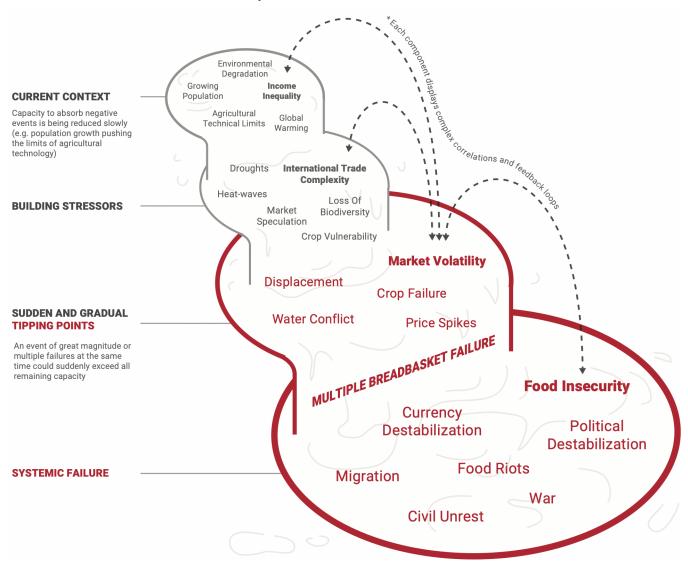
Recent large-scale elicitation exercises that draw on the insights of leading experts, including in environmental science, food systems, health and development, and security, anticipate significant cascading effects in the near term and towards and beyond 2040 if immediate and rapid mitigation and adaptation action is not taken (Brock et al 2021; Quiggin et al 2021a, 2021b). These effects could be potentially catastrophic under plausible scenarios of temperature rises.

Food security is of particular concern. Demand for food is growing and a small number of crops are relied on to meet the world's nutritional needs. The potential yields of these crops are being increasingly impacted by worsening environmental conditions such as extreme heat and drought (Romanello et al 2021). The probability that crops across four major food-growing regions (or 'breadbaskets') will experience a greater than 10 per cent loss is currently around zero, but could increase to around 50 per cent in the 2040s (Quiggin et al 2021a).

As a recent Chatham House report concluded, the cascading impacts for societies of these kinds of effects "can be expected to cause higher mortality rates, drive political instability and greater national insecurity, and fuel regional and international conflict" (ibid) (see figures 3.1 and 3.2).

FIGURE 3.1 Environmental shocks can cascade across societies Summary graphic to illustrate the impact of the interlinked and cascading effects of eye

Summary graphic to illustrate the impact of the interlinked and cascading effects of events on wider social and economic systems

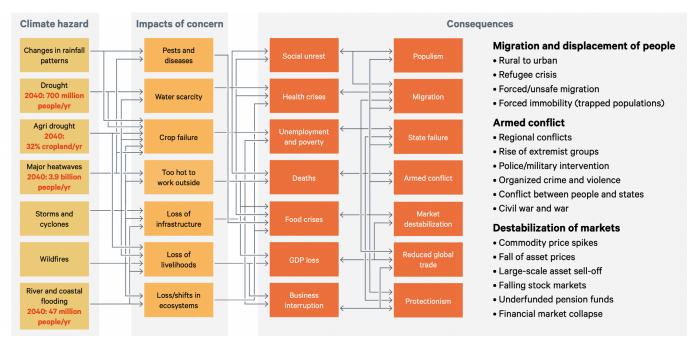


Source: Reproduced from UNDRR, Global Assessment Report on Disaster Risk Reduction (UNDRR 2019)

FIGURE 3.2

Severe cascading social and economic shocks are expected by the 2040s

Summary diagram of the major systemic risk dynamics identified by an expert elicitation process undertaken by Chatham House



Source: Reproduced from Quiggin et al, Climate Change Risk Assessment 2021 (Quiggin et al 2021a)

4.

THE CRUNCH POINT: OVERCOMING THE BURDENS IS UNDERMINED BY ACCELERATING DESTABILISATION

Without immediate and rapid action, it is expected that worsening environmental impacts and the vulnerability of societies will interact to create increasingly severe effects across the world over the coming decades (Quiggin et al 2021b). Towards the 2040s, non-linear environmental destabilisation could increasingly occur, which would significantly worsen an already severe situation.

Such a future could be unrecognisable from the present, a world of widespread heat extremes, persistent food stress, economic instability, more poverty and ill health, and conflict and insecurity (Brock et al 2021, Quiggin et al 2021a). Crucially, the complex interactions between destabilising natural and social and economic systems will not just create new systemic crises, like the current Covid-19 pandemic, but could also create a constantly evolving 'normal' characterised by increasingly severe non-linear and compounding effects (Laybourn-Langton et al 2020) – or, in other words, no normal.

Overcoming the three burdens will have to occur under these chaotic conditions. In turn, these conditions could undermine our ability to rapidly reduce and remove emissions, restore nature and adapt, creating negative feedback loops.

For example, worsening heat extremes, destructive flooding and the resultant economic instability could significantly increase the adaptation burden, which could

become simply too expensive or physically unmanageable for some countries. Such impacts could erode our ability to meet the removal and restoration burden, as forests grown to absorb CO2 are burnt by wildfires or cut down to fuel increasingly desperate populations suffering political conflict and extreme poverty. Worsening societal consequences could create political conditions in which the mitigation burden is seen as too great and, instead, nativistic leaders prioritise other interests over global emissions reductions and supporting vulnerable nations, continuing an emergent trend that combines anti-migrant scaremongering with fears of an environmental crisis (Turner and Bailey 2021).

This 'crunch point' – where a growing set of inherited burdens meets worsening environmental and societal destabilisation – presents an unprecedented challenge for leaders of the cohort 2040 generation. A huge range of potential paths lead beyond this crunch point. Two broad extremes are illustrated in figure 4.1.

PATH 1: A FRACTURED WORLD AND RUNAWAY ENVIRONMENTAL BREAKDOWN

The first path sees accelerating environmental destabilisation creating a far more unstable, volatile world that significantly exacerbates existing problems, such as inequality, poverty and geopolitical tensions. This is a worsening world of 'climate apartheid', a phrase used by the Human Rights Council's special rapporteur on extreme poverty and human rights (HRC 2019), in which those without significant resources and technology are left to the vagaries of instability. Attention on and cooperation to rapidly reduce and remove emissions and to help the most vulnerable and exposed around the world could be eroded and made far harder, leading to worsening impacts, which increase the chance of non-linear changes in the environment. In the extreme, these changes could push the function of the Earth's life support systems into a new, highly unstable state – illustrated as 'Hothouse Earth' in figure 4.1 – with catastrophic implications for humanity and other life on Earth (Lenton et al 2019).

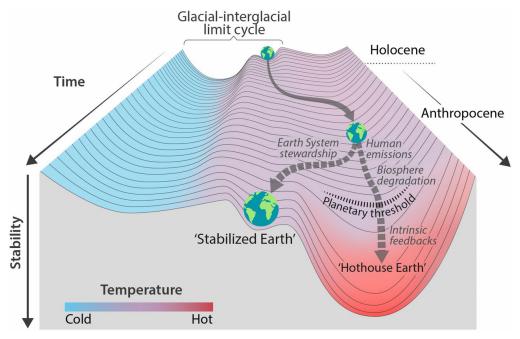
PATH 2: NAVIGATING SOCIETIES THROUGH THE STORM AND TO A SUSTAINABLE, EQUITABLE, RESILIENT FUTURE

The other path sees rapid and coordinated global action to realise, in the words of the UNEP, "a fundamental, system-wide transformation across technological, economic and social factors, including paradigms, goals and values" (UNEP 2021b). During this process, particular attention is paid to equity and justice as a means to improve cooperation and to mobilise the capabilities of all peoples even as conditions get worse. Leaders are able to effectively respond to compounding crises and to protect vulnerable populations across the world. They are also able to fight destructive non-linear changes in nature by productively using these disruptive moments to trigger positive tipping points in societies (Lenton et al 2021), driving non-linear changes in the rollout of clean technologies, healthier lifestyles and greater international cooperation. Ultimately, this path sees the natural world restabilised – the leftward path in figure 4.1 – and the world settles into undertaking a vast, multigenerational effort to restore abundant nature and to live more harmoniously.

FIGURE 4.1

Future leaders could have to navigate a severe 'crunch point'

The unbroken arrow shows the pathway of the increasing instability of the Earth System to date, while the broken arrows illustrate two divergent pathways into the future: runaway instability or restabilisation



Source: Reproduced from Steffen et al, 'Trajectories of the Earth System in the Anthropocene' (Steffen et al 2018)

5. NAVIGATING THE COHORT 2040 CHALLENGE

Getting through this crunch point could be the defining challenge facing future leaders. It will increasingly dominate the development of all other pressing challenges – including inequality, geopolitics, technological development and public health – and how we respond. The severity of the crunch point can and must be reduced by current leaders immediately taking more rapid and transformational action to reduce the three inherited burdens. These include (EJC 2021):

- significant emissions reductions before 2030
- the coordinated restoration of nature on a global scale
- meeting and exceeding support to vulnerable nations to improve resilience and to compensate for the inevitable loss and damage caused by wealthy, high-emitting nations.

This would constitute governments, businesses and civil society adopting a posture of 'planetary emergency', akin to the response to the Covid-19 pandemic, but on a greater scale (The Club of Rome 2020).

DEEP CHANGES CAN REDUCE THE BURDEN ON FUTURE LEADERS

Crucially, such an emergency response could be more effective – and the later crunch point less severe – if many of the constraints imposed by the economic policy orthodoxy are relaxed. These include prioritising concepts of wellbeing over compounding material growth, purposely dismantling large power imbalances in the global economy, and recognising the importance of greater equality and reparative justice in improving global cooperation and the capabilities of communities to rapidly reduce environmental impact.

These deeper changes are yet to be adopted by governments, let alone implemented globally. In response, an insurgent effort for transformational changes to realise sufficiently sustainable and more equitable and resilient societies and economic systems is being sought by a diverse range of groups across the world. The proposed policies and practice that constitute deep systems change will have to evolve to worsening conditions, as will strategies for winning the struggle to have these policies implemented.

FACING UP TO THE COHORT 2040 CHALLENGE

This is the cohort 2040 challenge. The struggle to realise fundamental change to societies and economic systems must be won to unlock a global response that is able to avoid non-linear environmental change and enables an ongoing process of restoring and restabilising the natural world. The growing destabilisation of societies could come to dominate this process. Focus must be maintained on making a better future as the present gets worse.

The circumstances facing future leaders – from a politician in Europe, through a chief executive in South East Asia, to a community leader in Africa – will differ, hugely dependent on sector, geography and other factors. But a range of core capabilities will need to be developed that ensure a more effective response to the cohort 2040 challenge. These include:

- 1. Embracing complexity (analytical). Developing a sophisticated, systems analysis of the causes, evolution and consequences of growing destabilisation in and between human and environmental systems is essential to navigating the coming decades. Mechanisms are needed to identify, monitor and better understand complex and rapid change across systems and to collaboratively respond to threats and opportunities.
- 2. Expanding global solidarity (relational). Greater connection with communities on the front line of destabilisation is needed around the world, ensuring their experience is foregrounded as part of an explicit strategy of creating a greater shared group understanding of the impacts of destabilisation, minimising perceptions of people as being part of an 'outside' group. In turn, considerations of equity are paramount, as is maximising the resources and agency of those who are most vulnerable. The chances of an effective global response are limited under conditions of high inequality and, as a result, low cooperation.
- 3. Caring collectively (emotional). The emotional and psychological implications of the worsening outlook are significant, unequal and will have a range of impacts on collective responses. These include elements in social psychology, such as heightening fear or empathy and their consequences for marshalling and maintaining an effective collective response under growing stress, as well as the emotional toll for individuals. Globally, it is essential that leaders can better support communities and entire populations in making sense of what is going on, how it came to this, and what must be done to navigate out, telling stories of focus and hope.

¹ See, for example, https://globaltapestryofalternatives.org and OECD (2020).

4. Improving adaptive capabilities (organisational). Organisations will have to develop their own forms of resilience, maintaining their capability to respond to rapidly changing, complex conditions, particularly those that are playing a critical role in the response to the environmental crisis, such as governments and humanitarian agencies (Brown and Dimsdale 2021). People and organisations should be better able to respond to rapid-onset shocks that present profound threats to and immediate opportunities for their agenda, such as in the case of the coronavirus pandemic. For those seeking deep social and economic systems change, strategies for struggling against and winning power should be robust to the worsening outlook, better identifying and acting on threats and opportunities in advance.

SUPPORTING EMERGING LEADERS

As the Covid-19 pandemic shows us, leaders can be either poorly or better prepared to face complex, systemic crises. The unique window into the future given by growing understanding of the environmental crisis and of systemic threats means that those who could be future leaders can and must try to better anticipate and be prepared for these challenges.

This briefing paper is the first output of a project – Cohort 2040² – that is seeking to better understand the challenge facing emerging leaders of the millennial and younger generations from growing destabilisation. We are exploring how to build a community that could help these leaders continue the struggle for a more equitable, sustainable and peaceful world under these conditions. This project will run through to the summer of 2023. We are exploring a range of ways in which such a community could be constructed and what it can usefully do, including:

- ongoing learning and research support to better understand the complex and uncertain trends of growing destabilisation and the potential burdens on future leaders
- convening discussions and strategising around the response to these conditions, including how to navigate the political implications of a worsening outlook and to ensure robustness against growing nativist and other extremist political positions
- developing advanced skills that will be needed in a more destabilised future and are also highly useful for the current activities of emerging leaders
- exploring and experimenting with future-fit capabilities through immersive scenarios and other experiences that simulate future conditions, improving preparedness but also altering career decisions in the present after immersion in potential futures
- building **solidarity and collective purpose** among groups of emerging leaders across the world and deepening the 'reciprocal vulnerability' of such groups
- connecting **expertise** and **support from across generations**, including through mentorship schemes and intergenerational peer learning.

Into the future, we will be releasing a range of reports and other outputs. If you are interested in learning more or would like to offer insights or expertise, please contact Laurie Laybourn-Langton, IPPR associate fellow and project lead, at langton@ippr.org or visit the external project website: https://www.cohort2040.org

² See cohort2040.org for more information. Elements of the Cohort 2040 project are being undertaken through IPPR, as well as other organisations.

REFERENCES

- African Ministers of Finance, Planning and Economic Development [AMFPED] (2021)

 Communique of African Ministers of Finance, Planning and Economic Development
 on Covid-19 and the Economic Situation in Africa, UN Economic Commission for
 Africa. https://www.uneca.org/sites/default/files/com/2021/E2100446-29MarchEng-COMMUNIQUE.pdf
- Anderson K and Peters G (2016) 'The trouble with negative emissions', *Science*, 354(6309): 182–183
- Asrar S (2021) 'Can you guess the age of a leader based on average age of country's population?', *Times of India*, 5 March 2021. https://timesofindia.indiatimes.com/world/rest-of-world/can-you-guess-the-age-of-a-leader-based-on-the-average-age-of-countrys-people/articleshow/81275841.cms
- Atwoli L, Baqui AH, Benfield T, Bosurgi R, Godlee F, Hancocks S, Horton R, Laybourn-Langton L, Monteiro CA, Norman I, Patrick K, Praities N, Olde Rikkert MGM, Rubin EJ, Shani P, Smith R, Talley N, Turale S and Vazquez D (2021) 'Call for emergency action to limit global temperature increases, restore biodiversity, and protect health', *New England Journal of Medicine*, 385: 1134–1137, doi: 10.1056/NEJMe2113200
- Austen I and Iasi V (2021) 'Vancouver is marooned by flooding and besieged again by climate change', *The New York Times*, 21 November 2021. https://www.nytimes.com/2021/11/21/canada-flooding-climate-change.html
- Brock S, Leighton Barrett O, Birkman L, Dick E, Emanual L, Goodman S, Guy K, Kabbej S, Middendorp T, Rademaker M, Remmits F and Tasse J (2021) *The World Climate and Security Report 2021*, Center for Climate and Security. https://imccs.org/wp-content/uploads/2021/06/World-Climate-and-Security-Report-2021.pdf
- Brown O and Dimsdale T (2021) Climate Risk Management for International Organizations, Chatham House. https://www.chathamhouse.org/2021/06/climate-risk-management-international-organizations
- Central Intelligence Agency [CIA] (2021) 'Country comparisons median age', The World Factbook. https://www.cia.gov/the-world-factbook/field/median-age/country-comparison
- Climate Change Committee [CCC] (2021) Progress in Adapting to Climate Change 2021: Report to parliament. https://www.theccc.org.uk/wp-content/uploads/2021/06/Progress-in-adapting-to-climate-change-2021-Report-to-Parliament.pdf
- Congressional Research Service [CRS] (2021) Membership of the 117th Congress: A profile. https://crsreports.congress.gov/product/pdf/R/R46705
- Convention on Biological Diversity [CBD] (2020) Global Biodiversity Outlook 5
- Environmental Justice Commission [EJC] (2021) Fairness and Opportunity: A people-powered plan for the green transition final report of the Environmental Justice Commission, IPPR. http://www.ippr.org/research/publications/fairness-and-opportunity
- Friedlingstein P, Jones MW, O'Sullivan M, Andrew RM, Bakker DCE et al (2021) *Global Carbon Budget 2021*, Earth System Science Data, doi: 10.5194/essd-2021-386 (please note, publication is in pre-print)
- Future Earth, The Earth League and WCRP (2021) '10 new insights in climate science 2021'. https://doi.org/10.5281/zenodo.5639539
- Hausfather Z (2021) 'UNEP: current climate commitments are "weak promises, not yet delivered"', *Carbon Brief*, 26 October 2021. https://www.carbonbrief.org/unep-current-climate-commitments-are-weak-promises-not-yet-delivered
- Human Rights Council [HRC] (2019) Climate Change and Poverty: Report of the special rapporteur on extreme poverty and human rights. https://reliefweb.int/report/world/climate-change-and-poverty-report-special-rapporteur-extreme-poverty-and-human-rights
- Huppmann D, Kriegler E, Krey V, Riahi K, Rogelj J et al (2018) 'IAMC 1.5°C Scenario Explorer and Data hosted by IIASA', Integrated Assessment Modeling Consortium and International Institute for Applied Systems Analysis, doi: 10.22022/SR15/08-2018.15429

- Intergovernmental Panel on Climate Change [IPCC] (2021) Climate Change 2021: The physical science basis: Contribution of working group I to the sixth assessment report of the Intergovernmental Panel on Climate Change [Masson-Delmotte V, Zhai P, Pirani A, Connors SL, Péan C, Berger S, Caud N, Chen Y, Goldfarb L, Gomis MI, Huang M, Leitzell K, Lonnoy E, Matthews JBR, Maycock TK, Waterfield T, Yelekçi O, Yu R and Zhou B (eds)], Cambridge University Press, in press
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services [IPBES] (2019) Summary for Policymakers: The global assessment report on biodiversity and ecosystem services. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
- Laybourn-Langton L, Emden J and Hill T (2020) We Are Not Ready: Policymaking in the age of environmental breakdown: Final report, IPPR. http://www.ippr.org/research/publications/we-are-not-ready
- Lenton TM, Benson S, Smith T, Ewer T, Lanel V, Petykowski E, Powell TWR, Abrams JF, Blomsma F and Sharpe S (2021) *Operationalising Positive Tipping Points towards Global Sustainability*, working paper series number 2021/01, Global Systems Institute, University of Exeter. https://www.exeter.ac.uk/media/universityofexeter/globalsystemsinstitute/documents/Lenton_et_al Operationalising_positive_tipping_points.pdf
- Lenton TM, Rockström J, Gaffney O, Rahmstorf S, Richardson K, Steffen W and Schellnhuber HJ (2019) 'Climate tipping points too risky to bet against', *Nature*, 575: 592–595, doi: 10.1038/d41586-019-03595-0. https://www.nature.com/articles/d41586-019-03595-0
- Organisation for Economic Co-operation and Development [OECD] (2020) Beyond Growth: Towards a new economic approach. https://www.oecd.org/governance/beyond-growth-33a25ba3-en.htm
- Organisation for Economic Co-operation and Development [OECD] (2021) Managing Climate Risks, Facing Up to Losses and Damages. https://www.oecd-ilibrary.org/environment/managing-climate-risks-facing-up-to-losses-and-damages 55ea1cc9-en
- Pörtner HO, Scholes RJ, Agard J, Archer E, Arneth A et al (2021) IPBES-IPCC Co-Sponsored Workshop Report on Biodiversity and Climate Change, IPBES and IPCC, doi: 10.5281/zenodo.4782538
- Qin Y, Xiao X, Wigneron JP, Ciais P, Brandt M, Fan L, Li X, Crowell S, Wu X, Doughty R and Zhang Y (2021) 'Carbon loss from forest degradation exceeds that from deforestation in the Brazilian Amazon', *Nature Climate Change*, 11(5): 442–448
- Quiggin D (2021) BECCS Deployment: The risks of policies forging ahead of the evidence, Chatham House. https://www.chathamhouse.org/sites/default/files/2021-09/2021-10-01-beccs-deployment-quiggin.pdf
- Quiggin D, De Meyer K, Hubble-Rose L and Froggatt A (2021a) Climate Change Risk Assessment 2021: The risks are compounding, and without immediate action the impacts will be devastating, Chatham House. https://www.chathamhouse.org/sites/default/files/2021-09/2021-09-14-climate-change-risk-assessment-quiggin-et-al.pdf
- Quiggin D, Townend R and Benton TG (2021b) What Near-Term Climate Impacts Should Worry us Most? Supporting the most exposed and vulnerable societies to reduce regional and global climate risks, Chatham House. https://www.chathamhouse.org/sites/default/files/2021-10/2021-10-19-what-near-term-climate-impacts-should-worry-us-most-quiggin-et-al_0.pdf
- Romanello M, McGushin A, Di Napoli C, Drummond P, Hughes N et al (2021) 'The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future', *The Lancet*, 398(10311): 1619–1662
- Steffen W, Rockström J, Richardson K, Lenton TM, Folke C, Liverman D, Summerhayes CP, Barnosky AD, Cornell SE, Crucifix M and Donges JF (2018) 'Trajectories of the Earth System in the Anthropocene', *Proceedings of the National Academy of Sciences*, 115(33): 8252–8259. https://www.pnas.org/content/115/33/8252.short
- The Club of Rome (2020) Planetary Emergency 2.0: Securing a new deal for people, nature and climate, in partnership with the Potsdam Institute for Climate Impact Research. https://clubofrome.org/wp-content/uploads/2020/09/COR-PEP Sep2020 A4 16pp-v2.pdf

- Turner J and Bailey D (2021) "Ecobordering": casting immigration control as environmental protection', Environmental Politics: 1–22
- United Nations Economic Commission for Africa [UNECA] (2017) 'Africa spending more than its fair share for climate adaptation, a new study reveals', 6 November 2017. https://archive.uneca.org/stories/africa-spending-more-its-fair-share-climate-adaptation-new-study-reveals
- United Nations Environment Programme [UNEP] (2021a) Emissions Gap Report 2021: The heat is on a world of climate promises not yet delivered
- United Nations Environment Programme [UNEP] (2021b) Making Peace with Nature:
 A scientific blueprint to tackle the climate, biodiversity and pollution emergencies.
 https://www.unep.org/resources/making-peace-nature
- United Nations Environment Programme [UNEP] (2021c) Adaptation Gap Report 2021: The gathering storm adapting to climate change in a post-pandemic world
- United Nations Office for Disaster Risk Reduction [UNDRR] (2019) Global Assessment Report on Disaster Risk Reduction. https://www.undrr.org/publication/global-assessment-report-disaster-risk-reduction-2019
- Watson C (2020) 'House of Commons trends: the age of MPs', House of Common Library. https://commonslibrary.parliament.uk/house-of-commons-trends-the-age-of-mps/
- World Meteorological Organisation [WMO] (2021) United in Science 2021: A multi-organization high-level compilation of the latest climate science information. https://library.wmo.int/doc num.php?explnum id=10794

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This paper was first published in January 2022. © IPPR 2022

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