BREAKTHROUGH National Centre For Climate Restoration

BRIEFING NOTE

Climate emergency briefing:

Impacts, risks & key actions in the age of climate-obstructive authoritarianism

FEBRUARY 2026

Summary

- Climate-hostile authoritarianism is stalking nations and global institutions, often allied with climate scepticism and denial. But as the globalisation cargo cult wanes, space opens up for nations to take greater control over their future and pursue higher-ambition, climate-focused mitigation, trade and security alliances.
- Global heating is accelerating, with the past three years averaging above 1.5˚C, driven by a reduction in sulfate aerosol emissions due to clean-air policies, and a related cloud feedback. The Earth's climate could be more sensitive to greenhouse gases than the central estimates, and warming is currently tracking the highest-emissions scenario. This would bring 2˚C well before 2050 and 3˚C around 2070. On this path, 4˚C by 2100 is feasible.
- Many extreme events and their impacts have been underestimated in climate models. Risks include climate-driven inflation and big economic shocks, and mass displacement and death.
- We are in the danger zone where multiple climate tipping points are being triggered, some of which accelerate warming and worsen impacts. Thus there is a point of no return, after which it may be impossible to stabilise the climate close to conditions in which human society can be maintained. This risk is now, and requires immediate action to avoid it.
- The nature and the proximity of catastrophic impacts, tipping points and abrupt and cascading changes constitute the climate emergency. This requires governments to make actions to prevent climate breakdown the first priority of economics and politics.
- Key climate emergency actions for safe climate conditions:
    - Moving rapidly on material quick wins, including reducing methane and other short-lived climate forcers, and halting deforestation;
    - Supercharging the transition with policies to activate positive economic tipping points, driving investment and jobs, and accelerating the rate of emissions reductions;
    - Working with nature, protecting and restoring natural carbon sinks at scale; and
    - Applying emergency brakes by researching/deploying technological solutions to rapidly reduce the energy imbalance and mitigate the risk of climate tipping points.

Climate action in the age of rising authoritarianism

Authoritarianism is stalking nations and global institutions, often allied with climate scepticism and denial. The globalisation cargo cult is now on the wane. These abrupt changes have direct implications for climate action, and open up some possibilities. Thirty-two fossil fuel companies were responsible for half the global carbon dioxide emissions in 2024 and state-owned fossil fuel producers made up 17 of the top 20 emitters.[1] All 17 are controlled by countries, in the main authoritarian, that oppose a proposed fossil-fuel phaseout and have veto power at the COPs.

The erosion of democratic politics has weakened climate governance, most notably in the United States. At the same time, the rise in nationalist politics has brought down the curtains on unfettered globalisation and the illusions that global institutions (such as the IMF, World Bank and UNFCCC, for example) have delivered on their promises. Many nations had abandoned the right to determine their economic future and handed huge power to global corporations, facilitated tax avoidance structures, failed to regulate the finance sector and enabled institutions such as the World Trade Organisation.

Global governance organisations have been hypocritical and selective in wielding power. Neo-liberalism's fetish with market "efficiency", deregulation and "lower taxes" has weakened the role of governments, and produced an unprecedented redistribution of wealth to the elites at the expense of everyone else. This has been the major breeding ground for political resentment amongst the working poor, and for the rise of authoritarianism.

It is now clear that, as bankers and economists such as Garnaut and Stern and Canadian Prime Minister Mark Carney have recognised, the inability of markets to fully assess the risks of, and respond adequately to, the threat of climate collapse is the greatest market failure in history. Governments must take the lead in correcting this huge economic distortion. There is an opportunity for governments to assert the right, and necessity, of their role in defending our future by courageous leadership and incisive interventions, before it is too late.

By abandoning failed global mechanisms and coercive controls, there is a new chance for nations to forge bilateral and regional agreements on climate action and other issues that reflect much higher ambition, rather than the current lowest-common-demoninator compromises. The Canadian prime minister referred directly to this moment for middle powers in his Davos speech.

Like-minded countries can make real progress on climate mitigation by putting a climate focus on trade and security arrangements. Actions such as the Carbon Border Adjustment Mechanism in Europe, and proposals for a climate-first foreign policy, as proposed by the Australian Security Leaders Climate Group (ASLCG), are examples. So too is the growing movement for a high-ambition fossil-fuel phase-out alliance amongst like-minded nations, which sprung from the failure of COP30.

The ASLCG has proposed a climate-first foreign policy grounded in an emergency response,, with a "commitment to deep cooperation with nations that prioritise climate disruption risks, with climate-focused agreements on tax, trade, technology, finance, equity and the like" and "diplomatic leadership in high-ambition alliances, such as agreements to phase out fossil fuel subsidies and international financing, to phase out the fossil fuel economy, and for economic climate mobilisation". [2]

There presents a new opportunity for middle powers to step up, and for governments to lead, in the face of climate threats of a scale that now makes civilisational collapse a realistic scenario.[3]

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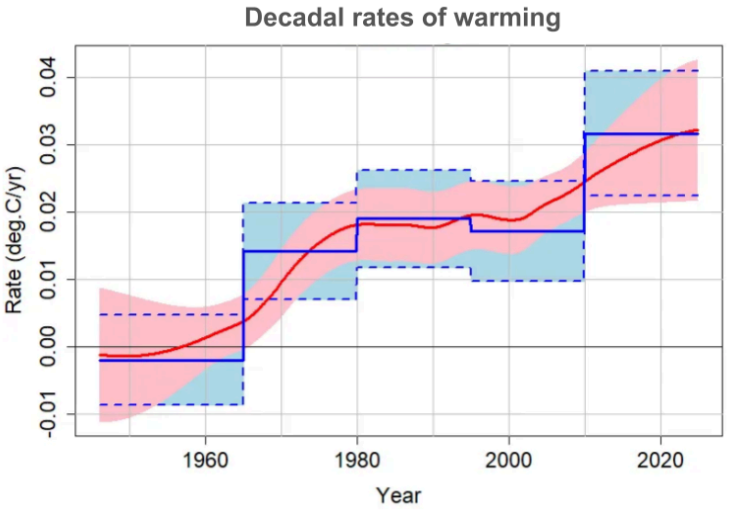
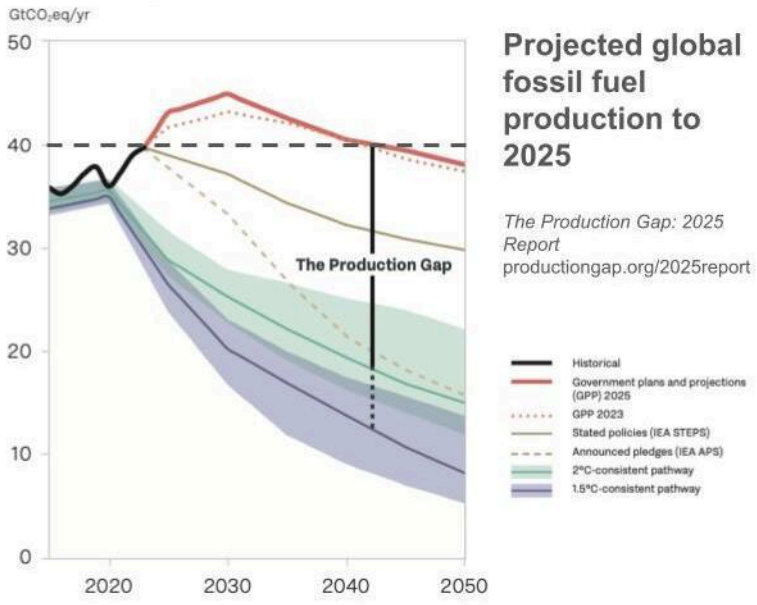
[1] theguardian.com/environment/2026/jan/21/carbon-dioxide-co2-emissions-fossil-fuel-firms-study
[2] aslcg.org/wp-content/uploads/2025/09/ASLCG-Climate-First-Foreign-Policy-Media-Release-3.pdf
[3] pnas.org/doi/full/10.1073/pnas.2210525119

The climate system: accelerated warming and high sensitivity

1. Emissions, warming and the energy imbalance





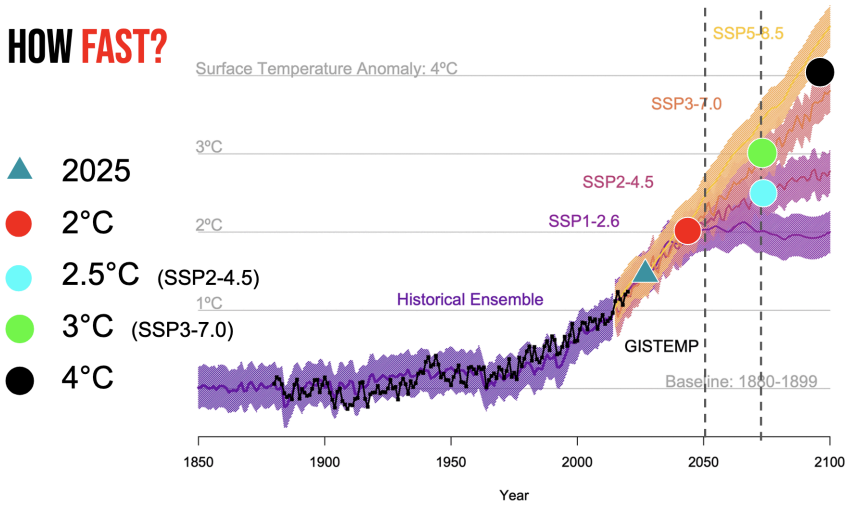
a. The global warming decadal average is already at 1.4˚C, with recent temperatures averaging above the 1.5˚C goal of the Paris Agreement for the last three years.[4] The rate of warming has accelerated over the last two decades, as illustrated at right, from less than 0.2˚C per decade from 1980-2000 to at least 0.3˚C per decade since 2010 (showing trends in Berkeley Earth temperatures, with pink and blue indicating two different statistical methods to fit the data).[5]

b. Emissions are projected to remain near current levels to 2050, as illustrated at right (*The production gap: 2025 report*).[6] The energy imbalance (EEI) — an indicator of future warming in the system — is increasing,[7] as is the rate of warming. This makes catastrophic heating of greater than 2˚C likely well before 2050 (and possible by 2040),[8] unless dramatic action is taken to change course.

c. Warming is currently tracking close to the highest-emissions scenario, known as SSP5-8.5.[9] On the current emission path, warming will very likely exceed 3˚C, as illustrated on the next page.[10]

[4] berkeleyearth.org/global-temperature-report-for-2023; berkeleyearth.org/global-temperature-report-for-2024; berkeleyearth.org/global-temperature-report-for-2025
[5] tamino.wordpress.com/2025/05/28/how-fast-is-the-world-warming/
[6] productiongap.org/2025report
[7] agupubs.onlinelibrary.wiley.com/doi/10.1029/2024AV001636
[8] esd.copernicus.org/articles/12/253/2021/esd-12-253-2021.html
[9] jimehansen.substack.com/p/warning-this-colorful-chart-is-censored
[10] nature.com/articles/d41586-021-02990-w

How fast? Illustrated are global mean surface temperature anomalies from GISS model simulations for 1850–2014 driven by observed emissions and for 2015–2100 by four Shared Socioeconomic Pathways (SSPs).[11] Warming reaches 2˚C in all four scenarios by 2050 and earlier for the high-emission pathways. Warming is currently tracking close to the highest- emissions scenario, SSP5-8.5. In this, and the other high- emissions scenario SSP3-7.0, warming reaches 3˚C around 2070.

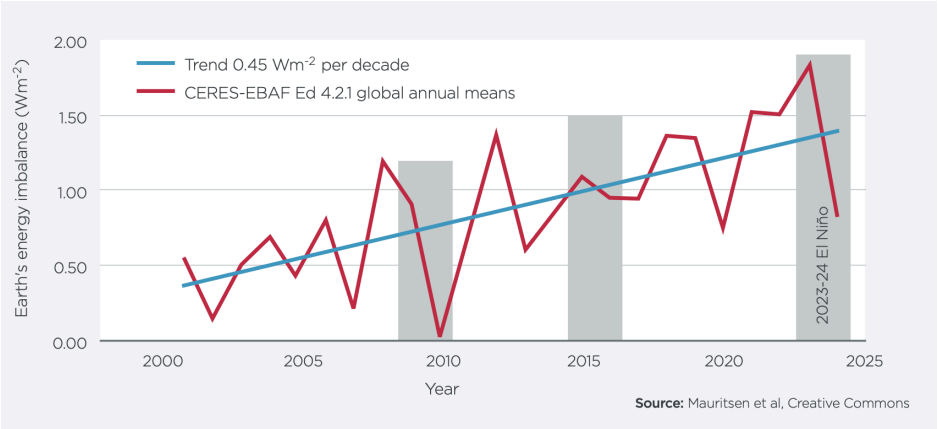


2. Aerosol cooling – the hidden sunshade and the termination shock

a. Sulfate particulates in the atmosphere from carbon pollution have acted like a sunshade, reflecting sunlight and fostering cloud formation, masking warming and thus reducing the energy imbalance. This "aerosol cooling" has offset warming by at least 0.5˚C (and perhaps as much 1˚C).[12]

b. Recent efforts to reduce sulphur from coal- and oil-burning emissions (especially shipping, and in China) have improved air quality, but had the side effect of reducing aerosol cooling and cloud formation, contributing to the warming acceleration in recent years.[13]

c. This can be termed as unmasking; others have referred to it as a "termination shock", and James Hansen has been warning about this "Faustian bargain" for decades.



Earth's energy imbalance (EEI) has more than doubled over the last 25 years. [14] Any increase in EEI should be reflected in an increase in the rate of warming.[15]

[11] giss.nasa.gov/research/features/202104_cmip6/
[12] agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017GL076079
[13] carbonbrief.org/explainer-how-human-caused-aerosols-are-masking-global-warming
[14] actuaries.org.uk/media/ isvotyer/parasol-lost.pdf
[15] theclimatebrink.com/p/the-great-acceleration-debate

3. Satellite data reveals the size of the termination shock and high sensitivity

a. New satellite measurements suggest that the impact of reduced aerosols may be larger than estimated in models and a significant contributor to recent accelerated warming, including less cloud cover, which together impact the amount of incoming solar radiation.[16]

b. If the aerosol cooling effect has been larger than previously believed, then more warming has been masked, and the Earth's climate could be more sensitive to greenhouse gases than the central estimate. This is consistent with the most recent iteration of climate models, known as CMIP6, which produce a higher climate sensitivity.[17]

c. This means that even without any more emissions, we may be on course for much more warming than expected. A plausible worst-case scenario, given the current emissions path, is 4˚C or more of warming by 2100.[18] A 2021 climate risk assessment by the UK's premier security think-tank, Chatham House, noted that:

> "Without continued expansion of decarbonization policies, emissions could continue to rise in line with the current policies scenario (CPS), or even RCP8.5, resulting in a near 90 per cent chance that temperatures in 2100 will exceed 4˚C relative to pre-industrial levels, with the median temperature rise in 2100 exceeding 5˚C, and a plausible worst-case increase of 7˚C (10% chance)."[19]

Global catastrophic risks, including economic shocks, are proximate

4. Risks include climate-driven inflation, migration and economic shocks

a. Climate impacts are accelerating, including heat spikes, and more extreme floods, fires and storms, which can cause significant disruption to food, water, health, energy and transport systems.[20]

b. Many extreme events and their impacts have been underestimated in climate models, including the severity of heatwaves, bushfires and flooding in Australia.[21] So have the likelihood of tipping points, particularly in the cryosphere including East Antarctica where Australia claims territory. [22]

c. Economic growth is threatened and insurance withdrawal is occurring in some regions. There has been an underestimation of the severity and proximity of these risks, which are now impacting global society, and may result in great loss of life, the mass displacement of people in our region, failed states and a breakdown in relations between nations. [23]

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[16] science.org/doi/10.1126/science.adq7280
[17] carbonbrief.org/cmip6-the-next-generation-of-climate-models-explained/
[18] chathamhouse.org/2021/09/climate-change-risk-assessment-2021/summary
[19] chathamhouse.org/2021/09/climate-change-risk-assessment-2021/summary
[20] theconversation.com/2022s-supercharged-summer-of-climate-extremes-how-global-warming-and-la-nina-fueled-disasters-on-top-of-disasters-190546
[21] nature.com/articles/d41586-024-00816-z.pdf
[22] thebulletin.org/2023/04/faster-than-forecast-climate-impacts-trigger-tipping-points-in-the-earth-system/
[23] aslcg.org/wp-content/uploads/2021/09/ASLCG_MIA_Report.pdf

5. Accelerated action is needed to reduce impacts and avoid derailment

a. Australia is facing catastrophic impacts this century including multi-metre sea-level rises, desertification, reduced crop yields, deadly new heatwave, fire and flood extremes, and much of northern Australia being practically unliveable due to extreme heat.[24]

b. Societal preparation can significantly reduce the impact of accelerated climate hazards. An immediate step up in pace and preparedness is needed to build resilience.

c. Simultaneously, safeguards must be put in place to avoid derailment risk, that is, society being too distracted by escalating crises and action needs to address the root causes of climate change by reducing emissions and other actions. [25]

6. Climate tipping points mean there is a point of no return

a. At 1.5˚C, we have entered the danger zone where multiple climate tipping points are being triggered, such as the collapse of ice sheets in Greenland and Antarctica, permafrost melt, Amazon dieback and changes in ocean circulation. [26]

b. Once triggered, many of these changes cannot be reversed on timescales relevant to human survival and development.[27]

c. Some tipping points accelerate climate change and worsen impacts, meaning there is a point of no return, after which it may be impossible to stabilise the climate close to conditions that we are able to adapt to.[28]

d. Avoiding such tipping points means we have to look to solutions that include faster emissions reductions, as well as actions that go beyond rapid zero emissions.[29]

7. Emissions reduction is not enough

a. Due to the aerosol impacts, weakening carbon stores in nature and the delayed impact of past emissions, even a sharp reduction in carbon emissions will have little discernable impact on the rate of warming for the following two decades. [30]

b. A safe level of atmospheric carbon dioxide is the pre-industrial level, [31] so large-scale carbon dioxide removal (CDR) or drawdown is imperative, but it is a slow process that by itself is insufficient to avoid tipping points, catastrophic and abrupt change and the risk of passing a “point of no return”.

c. To avoid tipping points and protect critical climate systems, it is necessary to research and if found safe and feasible deploy means for short term cooling and/or preserve

[24] aslcg.org/wp-content/uploads/2024/05/ASLCG_TooHotTooHandle_2024R.pdf
[25] esd.copernicus.org/articles/14/1171/2023/
[26] nature.com/articles/s43247-025-02299-w; nature.com/articles/s41586-025-09349-5; link.springer.com/chapter/10.1007/978-3-030-78795-0_2; nature.com/articles/s41558-025-02327-9
[27] phys.org/news/2022-06-irreversible-shifts-climate-experts.html; nature.com/articles/s41586-020-2727-5.epdf
[28] pnas.org/doi/10.1073/pnas.1810141115
[29] ccag.earth/reports/the-global-climate-crisis-and-the-action-required
[30] nature.com/articles/s41467-020-17001-1
[31] theconversation.com/beyond-net-zero-we-should-if-we-can-cool-the-planet-back-to-pre-industrial-levels-187781

those systems. [32]

Understanding systemic risks and emergency mobilisation

8. Emergency mobilisation

a. The nature and the proximity of catastrophic impacts constitute a climate emergency, which requires governments to make actions to prevent climate breakdown the first priority of economics and politics.[33]

b. The climate crisis qualifies as an existential emergency because it presents irreversible risks to planetary systems; it undermines the foundations of national and human security; it exceeds the scope of conventional risk management; and it exceeds the capacity of governments working in incrementalist modes which ignore the most damaging, high-end risks.[34]

c. When societies face existential threats, they can act fast, for example wartime mobilisation, disaster recovery, pandemics and economic reconstruction. In democratic nations, these responses have often harnessed public institutions, cross-party mandates, and mass civic participation not only to speed action, but to preserve legitimacy and fairness under pressure.[35]

d. In these moments, governments have suspended normal timelines, restructured economies, and coordinated resources at massive scale to achieve national objectives. Emergency mobilisation is not about panic but about priority and activating all available capacities toward a common goal, removing bottlenecks and bypassing market failure. Emergency mode is a shift in governance, mindset, and tempo. It replaces fragmented reform with coordinated transformation. The tools exist. The capacity exists. What has been missing is the decision to act. [36]

9. Invest in understanding and acting on the systemic risks

a. A government commitment is required to understand and act on the systemic nature of the climate risks, and to establish normative goals and identify events that should be well outside the risk appetite for our species, including:
   i. Crossing Earth system tipping points and triggering tipping cascades;
   ii. Habitat loss and species extinctions, breakdown of critical ecosystems;
   iii. Climate- and nature-driven forced displacement, conflict and mass mortality events; and
   iv. Derailment risk, where society is too distracted by escalating crises to address root causes.[37]

b. In Australia, government actions should include:

[32] agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2016EF000521
[33].breakthroughonline.org.au/_files/ugd/148cb0_3be3bfab3f3a489cb9bd69e42ce22e7c.pdf
[34] actuaries.org.uk/media/g1qevrfa/climate-scorpion.pdf
[35] ojs.zrc-sazu.si/filozofski-vestnik
[36] docs.wixstatic.com/ugd/148cb0_1bfd229f6638410f8fcf230e12b1e285.pdf
[37] actuaries.org.uk/media/isvotyer/parasol-lost.pdf

i. A coordinated, whole-of-government response, embedding systemic responses within and across departments, and establishing a Climate Emergency Committee of Cabinet, with transparent goals and a clear statement of risk appetite.
ii. Establishing a dedicated Climate Threat Unit within the Office of National Intelligence with regular, transparent analysis and advice to government and the parliament.[38]
iii. Establishing an Australian Institute for Earth System Science, tasked with developing, coordinating and implementing the national science required to deliver answers to nationally significant questions, including, potential for climate cooling and repair responses.[39]

Key climate emergency actions for a safe climate

10. Mindset shift and becoming planetary stewards and working with nature

a. We are intertwined with and dependent on the Earth system, which we have been shaping since prehistoric times. Beyond greenhouse gas emissions and aerosol cooling, human impacts include deforestation, bottom trawling, extermination of megafauna, wetland drainage and urbanisation.

b. We need to recognise the agency we have and intentionally manage our interactions with our biggest ally: the living world.

11. Quick wins: Moving rapidly on material quick wins, reducing methane and other short-lived climate forcers, and halting deforestation

a. Rapid movement on methane emissions and other short-lived climate forcing agents could be one of the most significant quick wins we have. Methane accounts for approximately 30-45% of the current rate of global warming from human activity, and reductions translate into immediate climate benefits by rapidly slowing temperature rise. Delivering on the Global Methane Pledge's goal of a 30% reduction by 2030 would significantly help reduce Earth's energy imbalance.[40]

b. Halting deforestation has been identified as an "emergency brake" solution that could reduce global emissions by up to four gigatonnes annually, close to the annual emissions of the United States. Global deforestation in 2024 contributed to the loss of 30 million hectares of natural forest, with wildfire a significant contributory factor.[41]

c. Simultaneously, we must protect land-based carbon sinks, restore ocean carbon sinks and explore technological solutions to ensure we aren't tripped up by the loss of aerosol cooling.

[38] aslcg.org/wp-content/uploads/2024/10/ASLCG_ActionPlan-1.pdf
[39] science.org.au/supporting-science/science-advice-and-policy/decadal-plans-for-science/a-decadal-plan-for-australian-earth-system-science-2024-2033
[40] globalmethanepledge.org/
[41] academic.oup.com/bioscience/advance-article/doi/10.1093/biosci/biaf149/8303627; theconversation.com/in-2024-the-climate-crisis-worsened-in-all-ways-but-we-can-still-limit-warming-with-bold-action-26857

12. Supercharge the energy transition

a. Policy interventions to activate the positive economic tipping points, driving investment, jobs, growth and accelerated emissions reductions are core activities.

b. The energy transition is a classic human development story featuring novel technologies that disrupt incumbents. History shows that change can happen surprisingly quickly when new technologies emerge, particularly if those new technologies offer both cost and convenience advantages. What is now increasingly recognised is that this is an economic opportunity.

c. Key actions include an end to fossil fuel subsidies;[42] an immediate end to export licences for new Australian fossil fuel production and a planned phase-out of existing production; taxing coal and gas exports appropriately for the damage they cause,[43] including introducing a fossil-fuel export levy to fund emergency response and adaptation programmes.[44]

d. In the absence of global agreements, establishing border carbon pricing to insure that import prices reflect the fossil-fuel damage incorporated in those goods and services.[45]

13. Working with natural systems to enhance carbon dioxide removal

a. It is already too hot and climate disruption is already dangerous. Reducing the level of atmospheric carbon is crucial.

b. Implement a strategic approach to protecting and restoring natural carbon sinks at scale, capturing carbon and leveraging the cooling potential of trees and forests. It is difficult to envisage a viable recovery plan that does not include an intentional, structured and strategic approach to protecting and restoring natural carbon sinks. Nature should be recognised as a strategic investment opportunity, and critically important for climate given the materiality of carbon sinks associated with tipping points. An essential starting point should be the ending of the remaining native forest logging in NSW and Tasmania and implementation of strict limits on land clearing.

c. The ocean absorbs huge amounts of heat and carbon. Protecting and restoring marine carbon sinks, including the restoration of marine biomass, offers significant carbon sequestration potential. Action on over-fishing and bottom trawling, including implementation of marine protected areas, are an urgent priority.

14. Emergency brakes

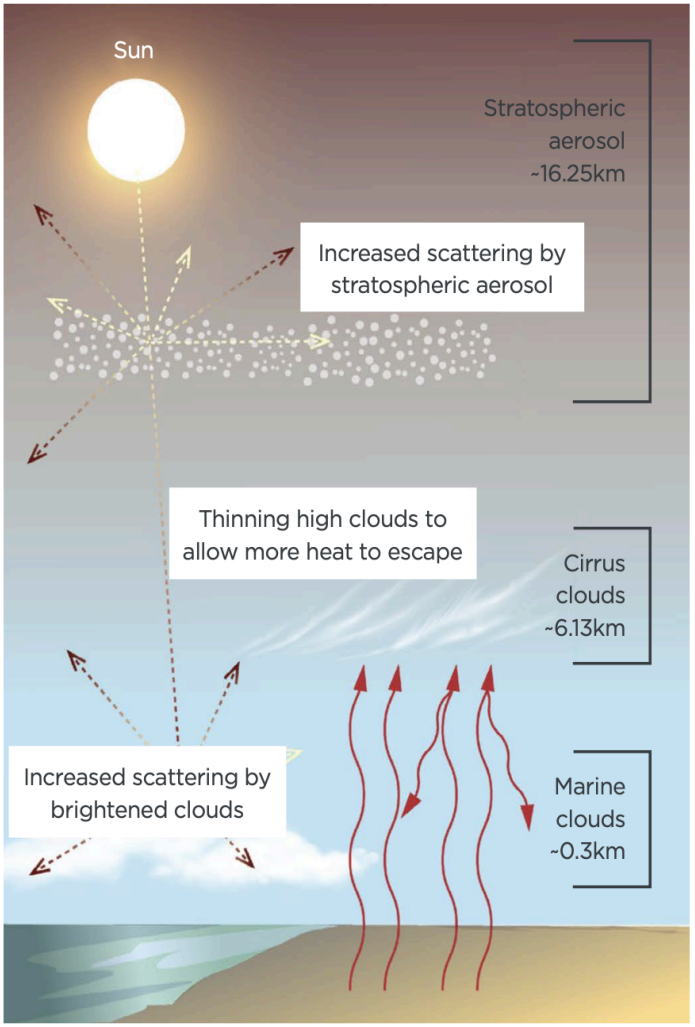
a. A range of potential technological solutions (climate interventions) exist to rapidly reduce Earth's energy imbalance (EEI), reduce warming and mitigate the risk of tipping points. There are valid concerns about the implications and potential unintended

[42] e360.yale.edu/digest/fossil-fuels-received-5-9-trillion-in-subsidies-in-2020-report-finds
[43] canberratimes.com.au/story/9127374/ebony-bennett-how-to-end-the-great-australian-gas-rip-off/
[44] australiainstitute.org.au/initiative/the-national-climate-disaster-fund/
[45] brookings.edu/articles/what-is-a-carbon-border-adjustment-mechanism/

consequences of some of these methodologies; more research is urgently needed to more fully understand these.

b. However, emergency brakes are useless if deployed too late and, given the level of risk now faced, our pathway to a prosperous future has narrowed, and we face a break-glass moment.[46]

Global Solar Radiation Modification (SRM) has the potential to reduce EEI relatively quickly after it is deployed, but there are risks which are discussed later in this section. More research and development is needed before it could be deployed, and issues of international governance should be carefully considered.[47]



c. A key intervention is solar radiation modification (SRM) – reflecting sunlight to reduce its warming effect. This could be localised as with marine cloud brightening or global as with aerosol disbursement at large scale into the stratosphere. It has the potential to reduce the energy imbalance relatively quickly after it is deployed.[48]

d. Other options include thinning out high-altitude ice clouds to increase the amount of terrestrial radiation escaping into space; brightening land surfaces to reflect more sunlight, for example by painting rooftops white or modifying crops; and glacial geoengineering in polar regions to slow ice melt.

e. Australia should establish a national fund and research centre to support such work and as a matter of priority, as the UK and other nations have done.

[46] agupubs.onlinelibrary.wiley.com/doi/10.1002/2016EF000450
[47] actuaries.org.uk/media/isvotyer/parasol- lost.pdf
[48] academic.oup.com/oocc/article/4/1/kgae014/7731760

Acknowledgements

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We thank them for their valuable work and insights.

Sources

Full references/sources and supporting evidence may be found in *Parasol Lost*, and in the Breakthrough report, *Collision course* (breakthroughonline.org.au/collisioncourse).

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Melbourne, Australia
breakthroughonline.org.au
info@breakthroughonline.org.au
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