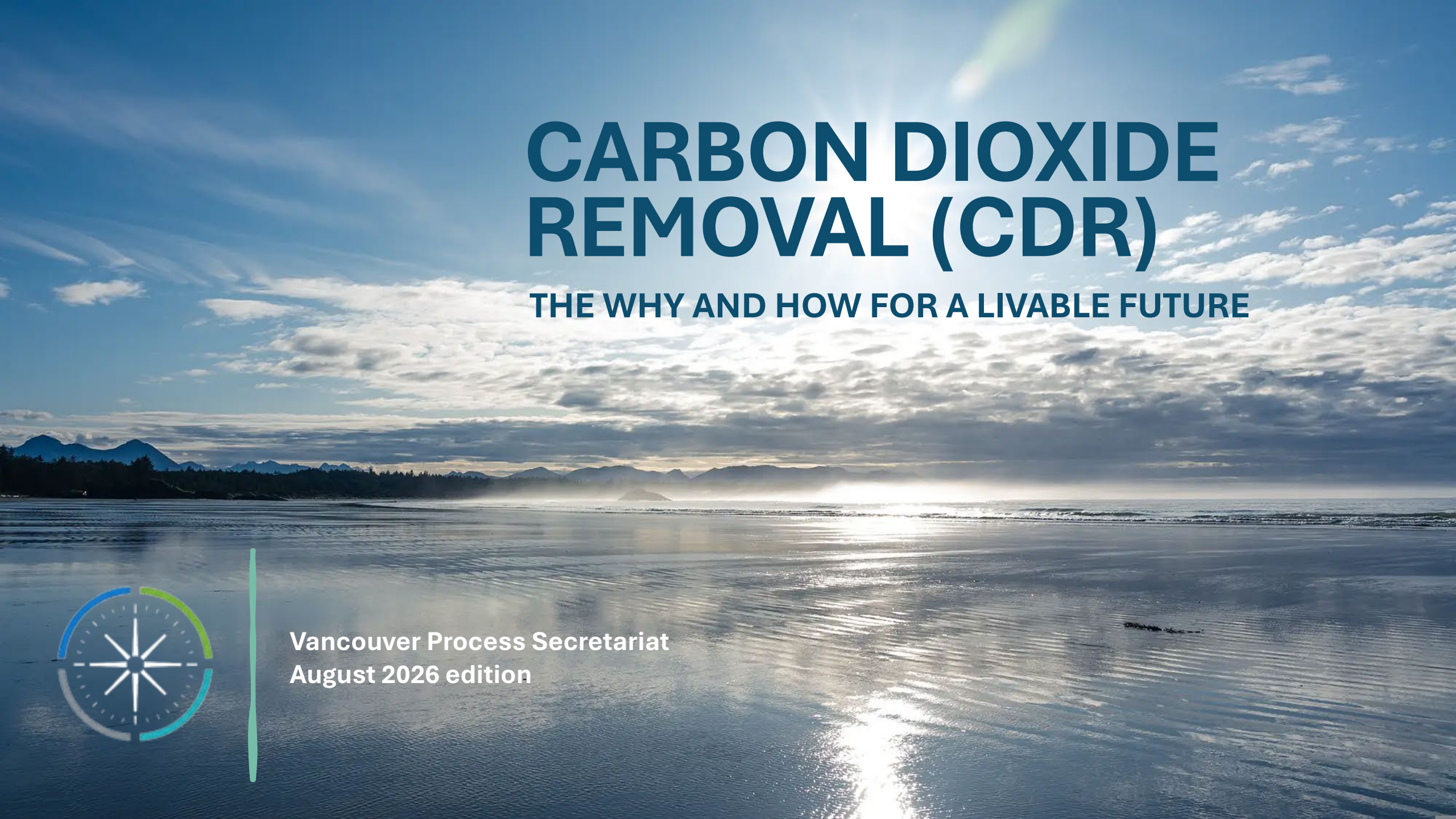


CARBON DIOXIDE REMOVAL (CDR)

THE WHY AND HOW FOR A LIVABLE FUTURE

Vancouver Process Secretariat
August 2026 edition

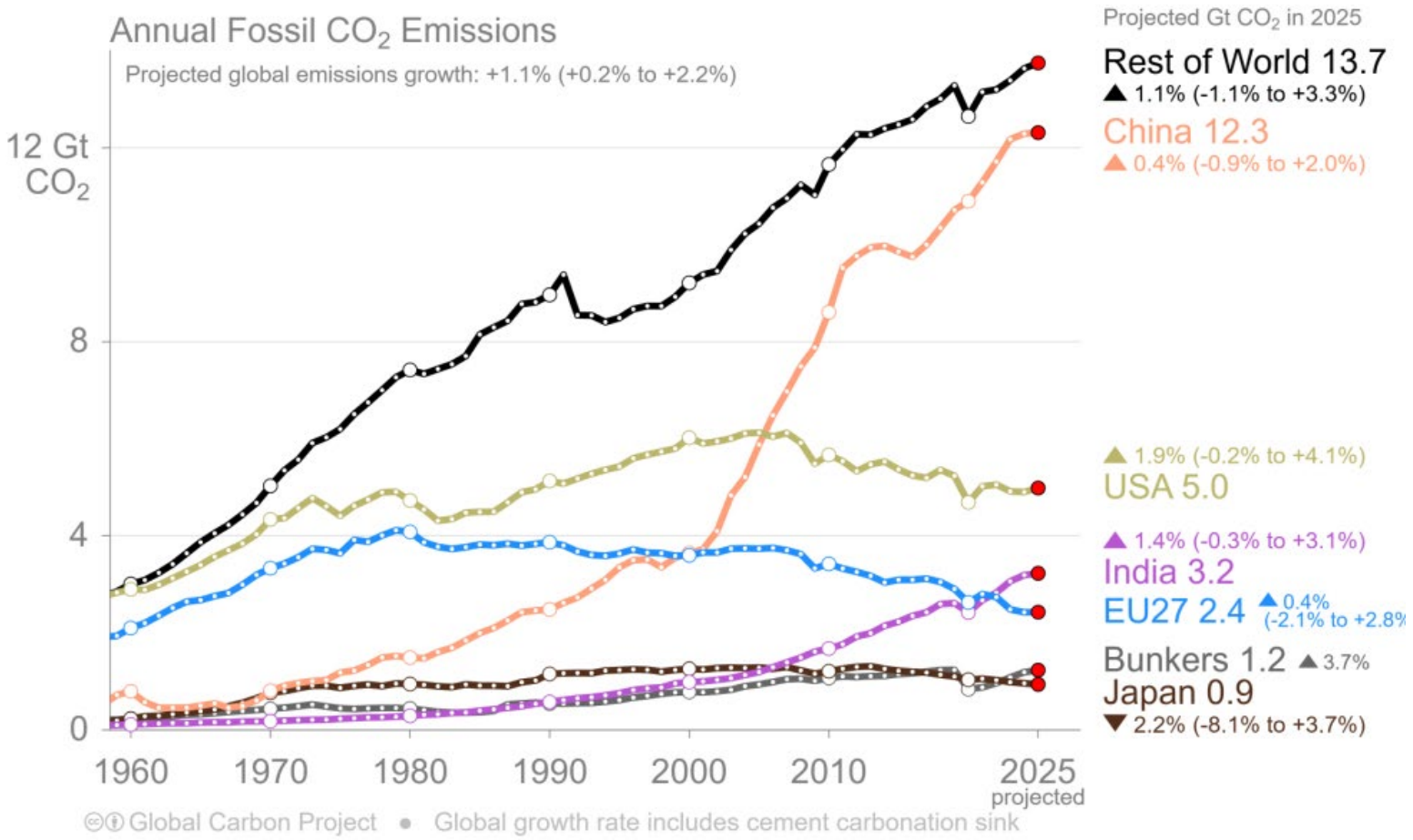
OUR CO2 PROBLEM

Our CO2 problem is clearer today than ever before.

Paris goals

Recognizing the increasing threat of global warming driven by fossil fuel use, 195 nations signed the landmark UN Paris Agreement in December of 2015, which promised to hold global average temperatures to “well below 2°C above pre-industrial levels” by reducing their fossil fuel emissions. Nations further agreed that holding this increase to 1.5°C was a realistic ambition that would be better for the Earth than 2°C. Climate models at the time showed we might reach 1.5°C by 2040 if warming continued at its current rate.

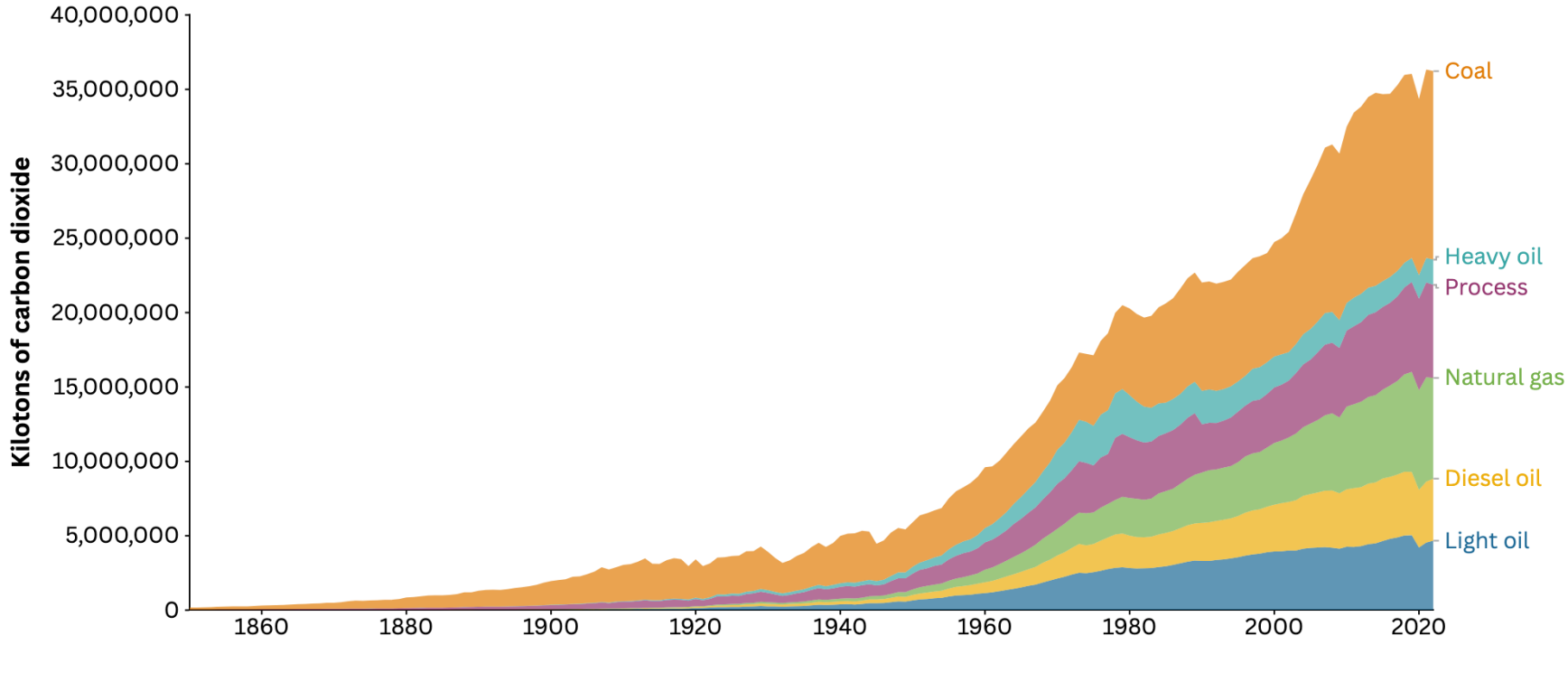
Reality



Source: New figures confirm: Global fossil co_2 emissions continue a persistent rise

Unfortunately, **we didn't meet our emissions goals**—emissions continued to increase after the Paris Agreement was signed. Estimates vary, but we're currently on pace to emit around 42 billion tons of CO2 into our atmosphere in 2026, up from around 40 billion tons in 2015.

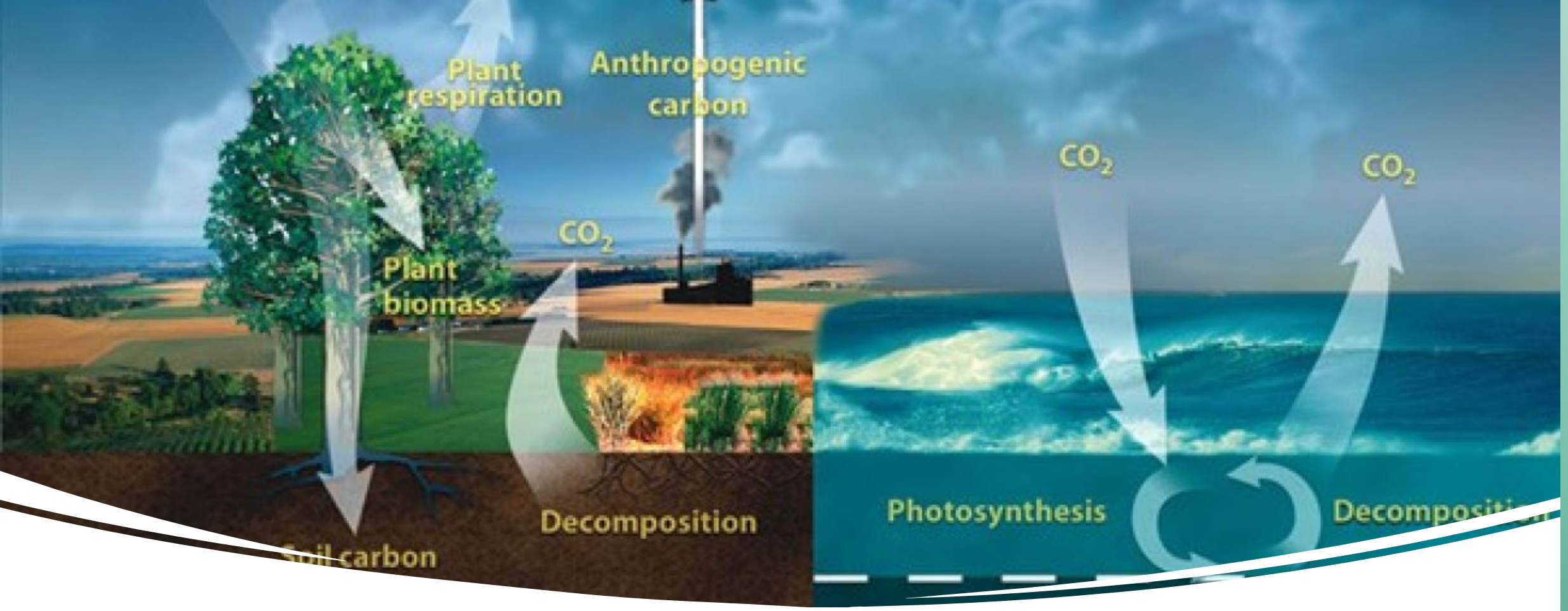
The trend



Source: Hoesly et al. (2024)
Boston University Institute for Global Sustainability | visualizingenergy.org | CC BY 4.0

visualizingEnergy

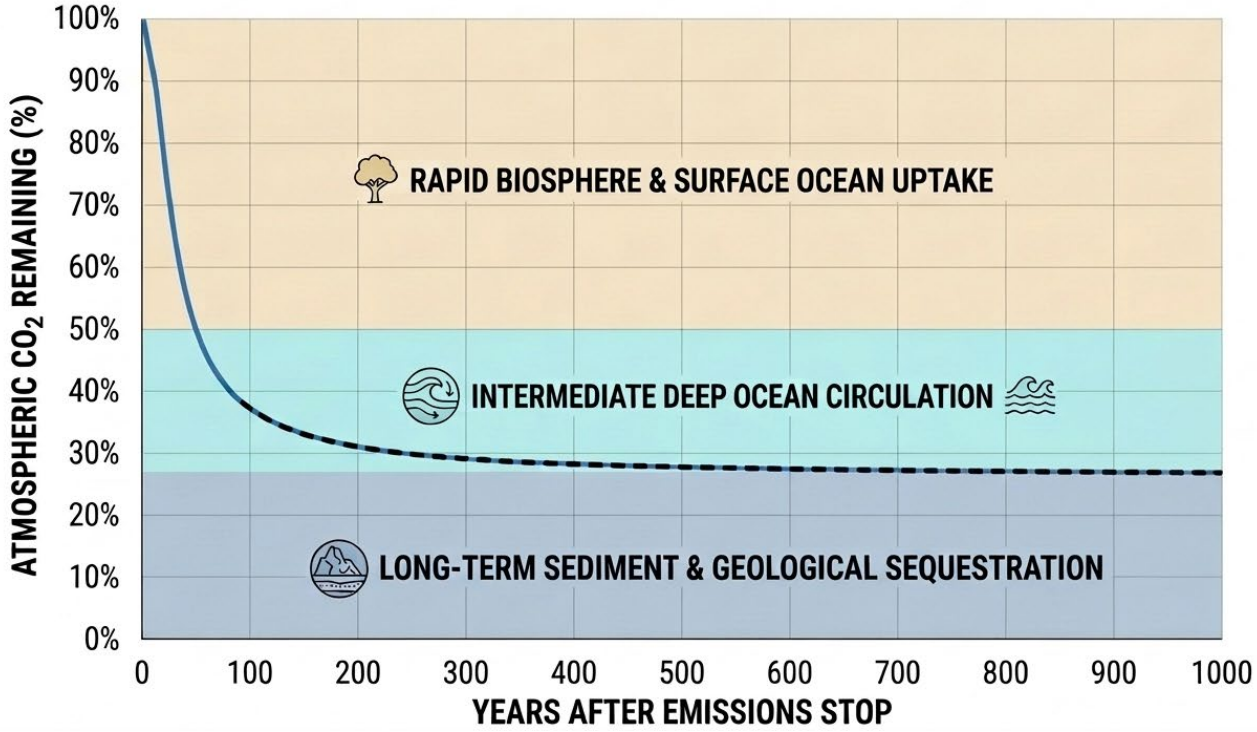
The fault for this this increase isn't with Paris, but history. Since the early 1800s, humans have increasingly burned fossil fuels—about 40% for heating and electricity, one quarter for industrial manufacturing, 15% for transportation. Suddenly transitioning to other sources of energy is obviously in our long-term best interest, but the trendline and geopolitical challenges both have immense inertia.



Earth in balance

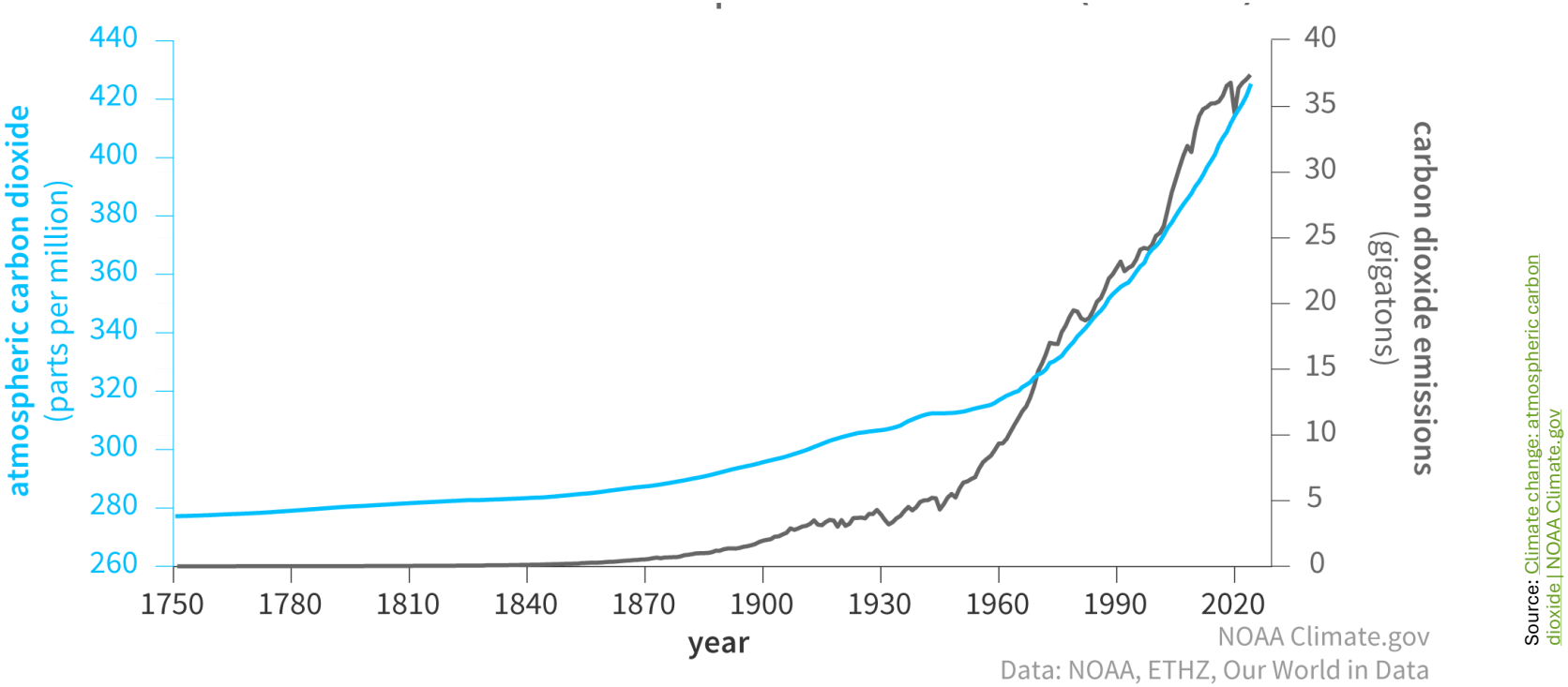
Carbon dioxide per se isn't the problem. Carbon dioxide gets released and absorbed all around us every day as part of our planet's natural carbon cycle. The exact totals have varied over earth's history, but today, natural sources (mainly decomposition) release around 190 billion tons per year of CO2 into our atmosphere annually, and most of this gets removed (reabsorbed) by our oceans, trees, soils, rocks and grasslands. **It's the extra CO2 that's the problem**.

Rate matters



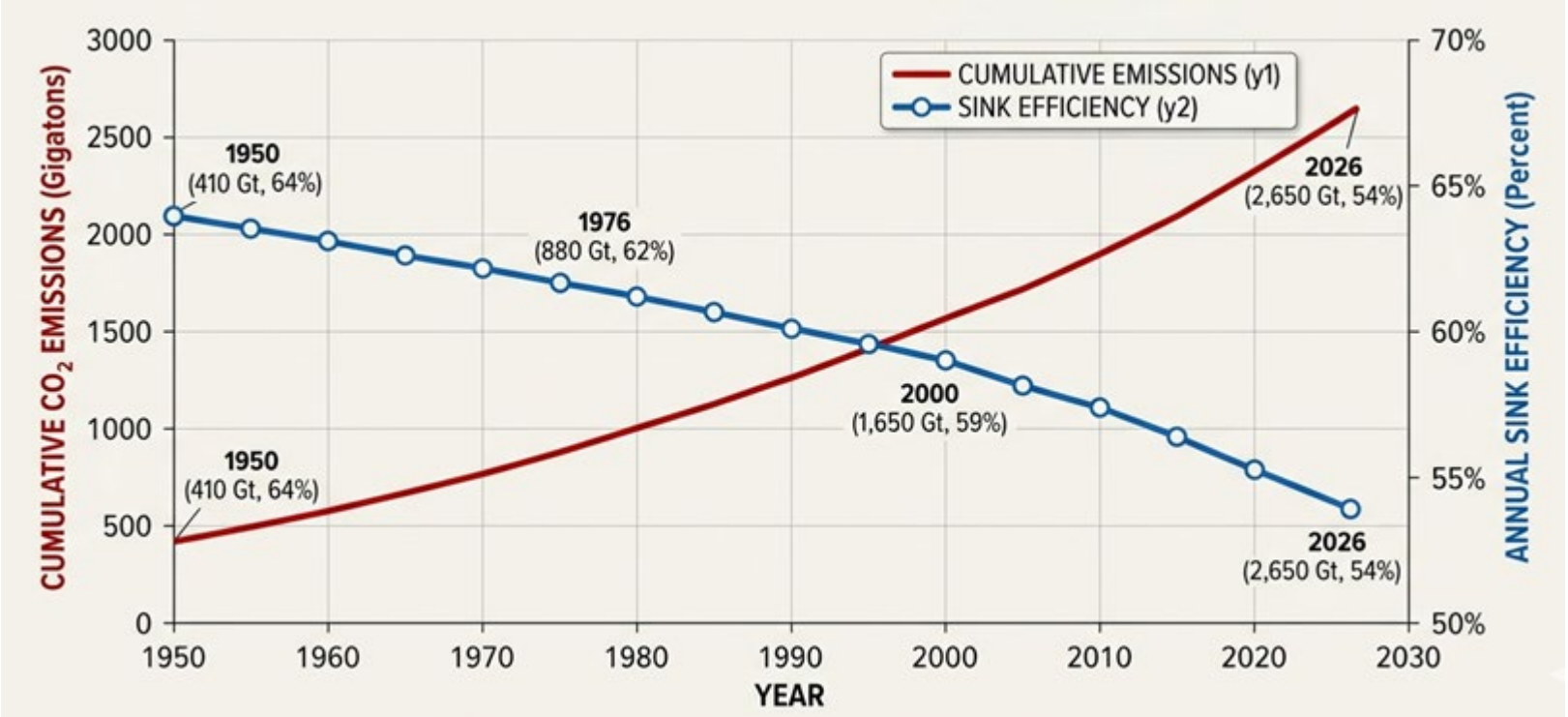
We're currently adding CO2 to our planet's atmosphere much faster than the carbon cycle can respond. Plants and upper oceans can only clear about half of our 42 gigatons of annual CO2 emissions. While the upper ocean dissolves gas quickly, chemical saturation limits how much it can hold. As well, moving this absorbed carbon down into the permanent, deep-ocean reservoir relies on biological sinking and currents that take 500 to 1,000 years to loop just once. Because our input speed completely outpaces this natural conveyor belt, excess CO2 is forced to back up into the atmosphere, creating a multi-eon warming tail.

So does density



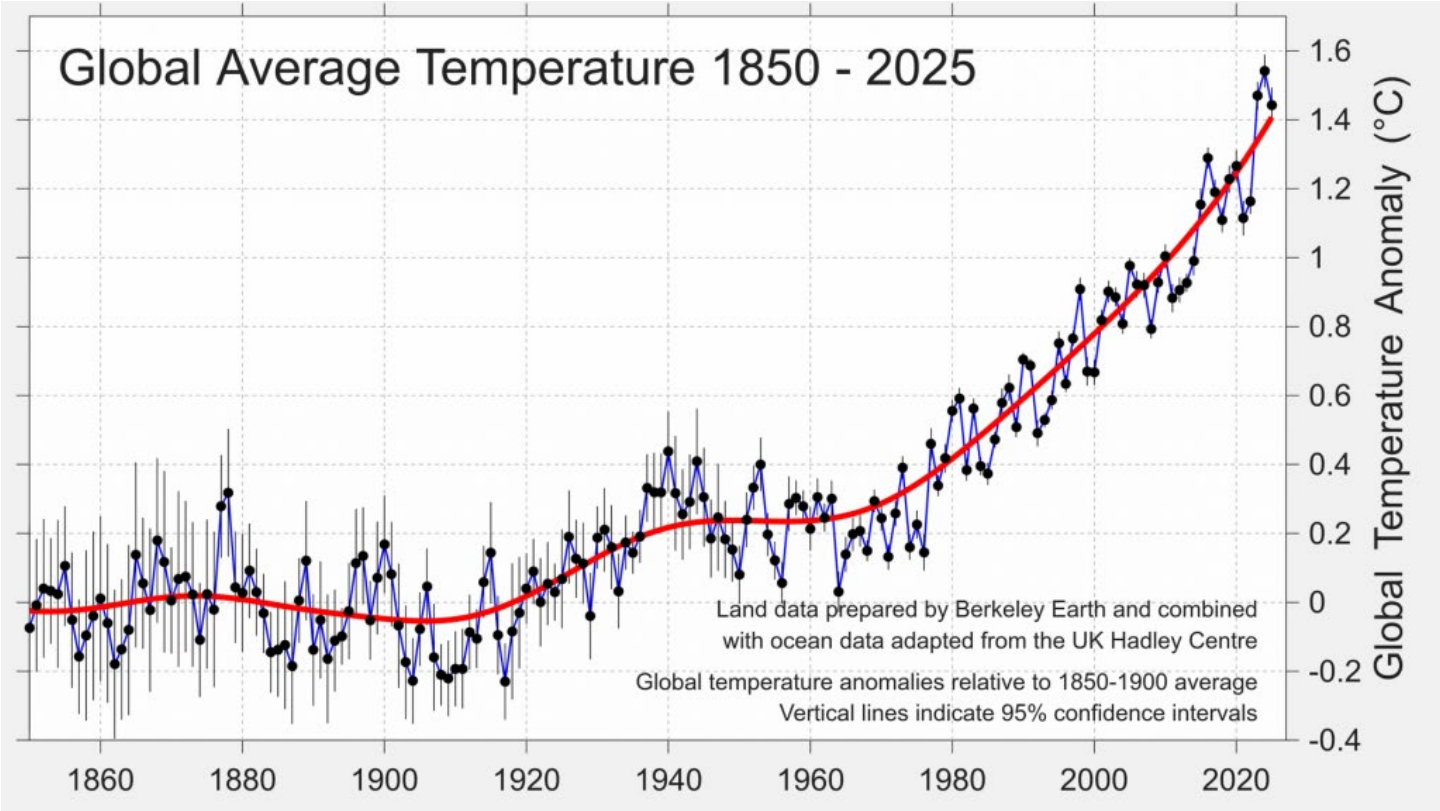
Atmospheric CO2 concentrations are rising quickly. In our oceans, this increases acidity, which harms marine life. High CO2 concentrations also intensify surface warming and create a highly buoyant upper layer that acts like a physical lid, slowing down the vertical mixing forces that carry carbon to the deep sea and choking off the downward transport of oxygen. Simultaneously, higher CO2 concentration increases our planet's greenhouse efficiency, **trapping heat lower down** and forcing it to escape at a higher, colder altitude. This altitude shift restricts our planet's ability to radiate energy out to space, locking in continuous warming.

And total volume



In 1950, when our cumulative CO2 footprint totaled 410 gigatons, our planet's natural sinks were able to absorb roughly 64 percent of our annual CO2 emissions. Today, the volume of CO2 humans have dumped into the Earth's atmosphere totals 2650 gigatons, further saturating sinks and dropping absorption efficiency to 54 percent. **Several vital sinks are losing their absorbing power entirely**, and some highly stressed carbon sinks are actively flipping into carbon emitters. For example, during recent extreme climate droughts, the Amazon became a net emitter of CO2.

We are here

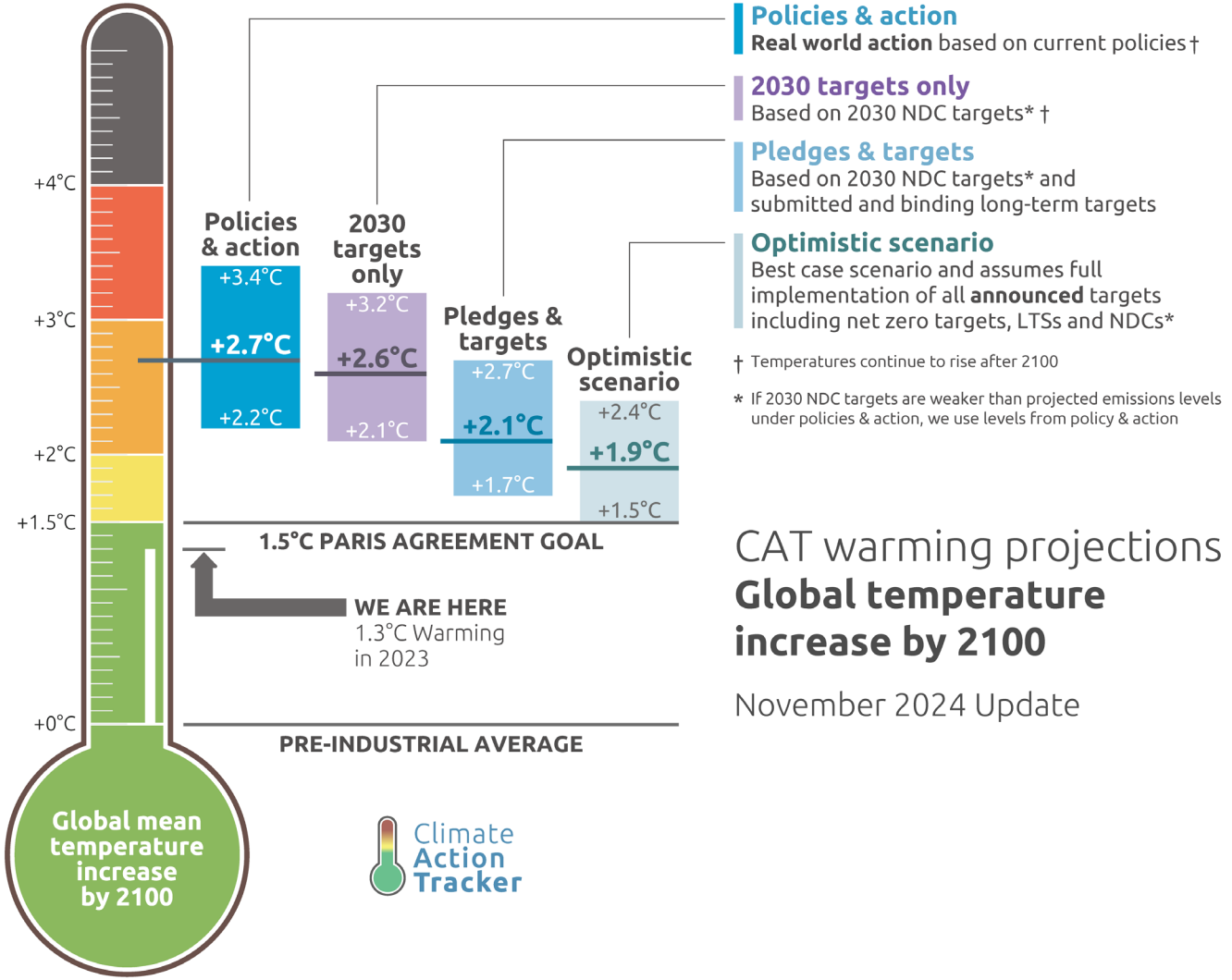


Source: Press Release: Berkeley Earth: 2025 Was the Third Warmest Year on Record, Extending an Unprecedented Run of Global Heat - Berkeley Earth

In 2024, global average temperatures reached 1.55°C above pre-industrial levels. According to the WMO, there is now a 70% chance the 5-year warming average for 2025-2029 will be more than 1.5°C. **We have reached our Paris Agreement limit 10 years earlier than expected.**

Where do we end up?

We simply don't know—our models aren't accurate enough. Many climate researchers today are surprised by how quickly global temperatures have been rising; others warn we're being overly optimistic about the impact that emissions reduction might have. Meanwhile, the climate policy community is "comfortable" with the consensus that temperatures will increase by around 2.7°C by the end of our century. But some estimates put this increase much higher.



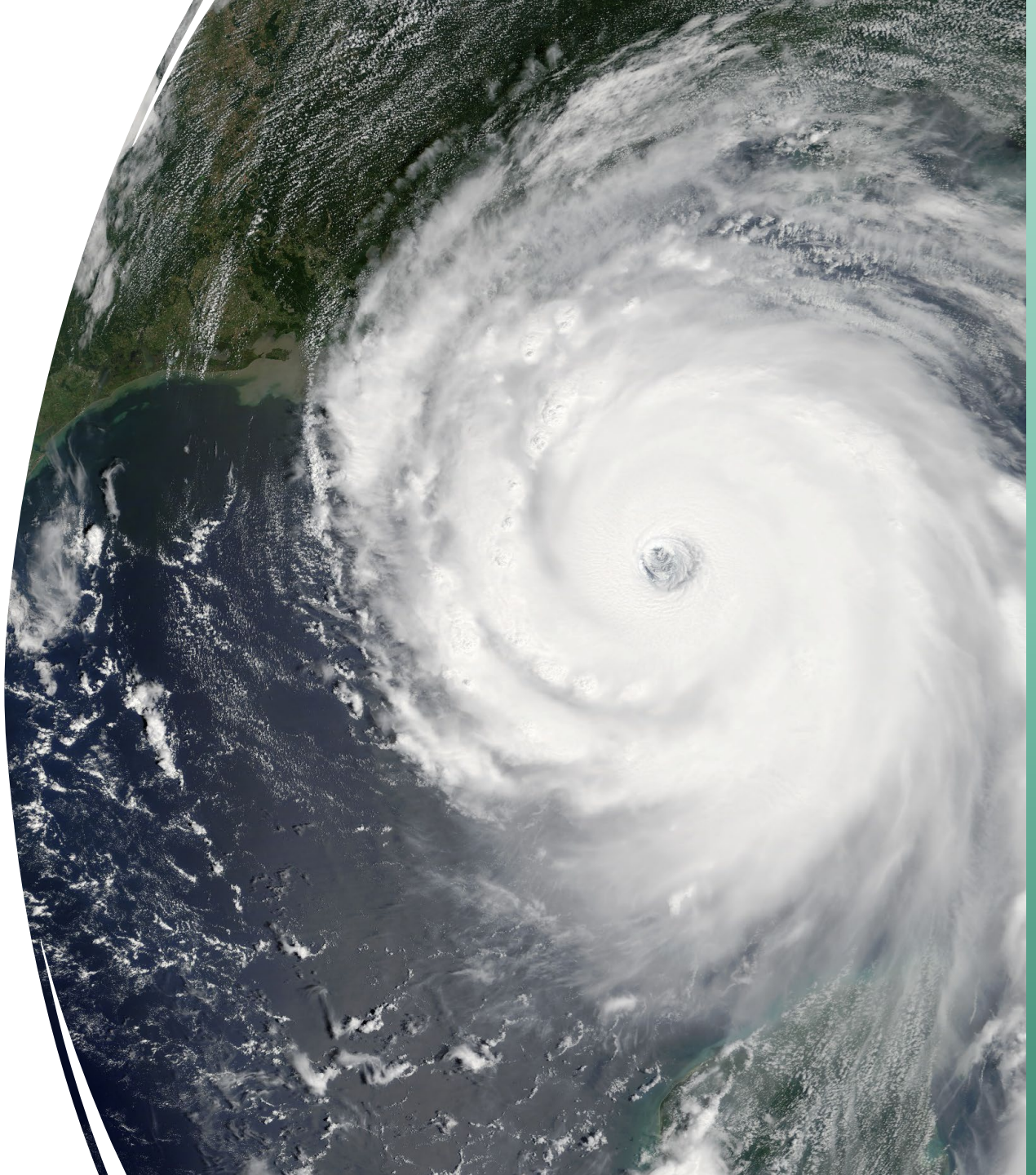
CAT warming projections
Global temperature increase by 2100

November 2024 Update

Environmental impacts

These increases might seem tiny, but our earth's climate balances on a razor's edge. While the Paris Agreement aimed to hold temperatures below 1.5°C, even a 1°C rise is unsustainable. **The risks of 2°C are immense; the 3°C we're expecting will be unstable,** and the 4-5°C world that's possible will be unlivable outside pockets of extreme privilege.

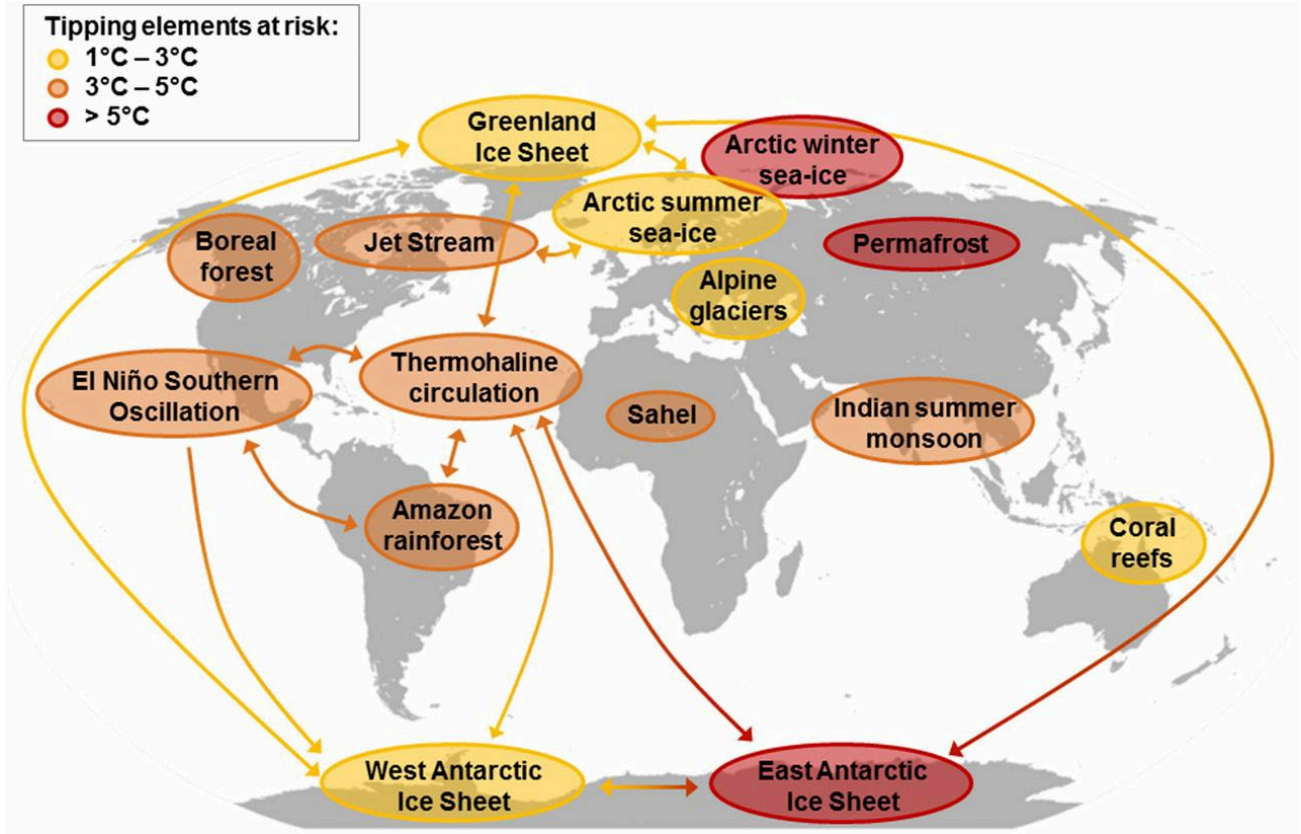
Already at the leading edge of a 1.5°C world, the environmental impacts have been frightening: Intensely destructive forest fires, eroding coastlines, rapidly acidifying oceans, violent weather, and increasingly unlivable heat.



Feedback & tipping points

These rising temperatures and environmental impacts are **triggering feedback loops** that make our future climate impossible to predict.

Thawing permafrost is releasing huge amounts of methane, which is pushing temperatures even higher (methane is the currently the second largest driver of warming, accounting for as much as 30% of current increases). Dying forests and acidifying oceans are less able to soak up carbon dioxide. Melting ice exposes darker surfaces that absorb more heat. Cloud decks that reflect sunlight are destabilizing. Increased evaporation is trapping more heat. The AMOC current is destabilizing.



Global map of potential tipping cascades. The individual tipping elements are color- coded according to estimated thresholds in global average surface temperature (tipping points). Arrows show the potential interactions among the tipping elements based on expert elicitation that could generate cascades. Note that, although the risk for tipping (loss of) the East Antarctic Ice Sheet is proposed at >5 °C, some marine-based sectors in East Antarctica may be vulnerable at lower temperatures. Source: Trajectories of the Earth System in the Anthropocene | PNAS.

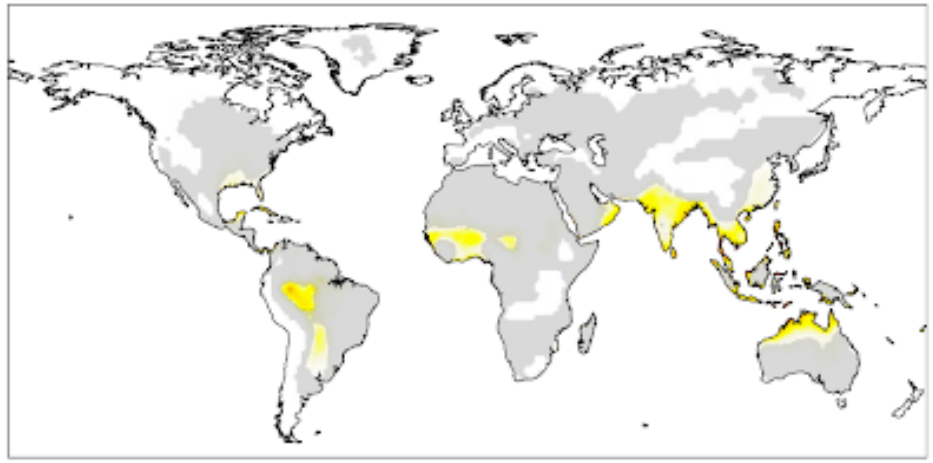
Socioeconomic impacts

The social and economic impacts of our changing planet will be severe as well.

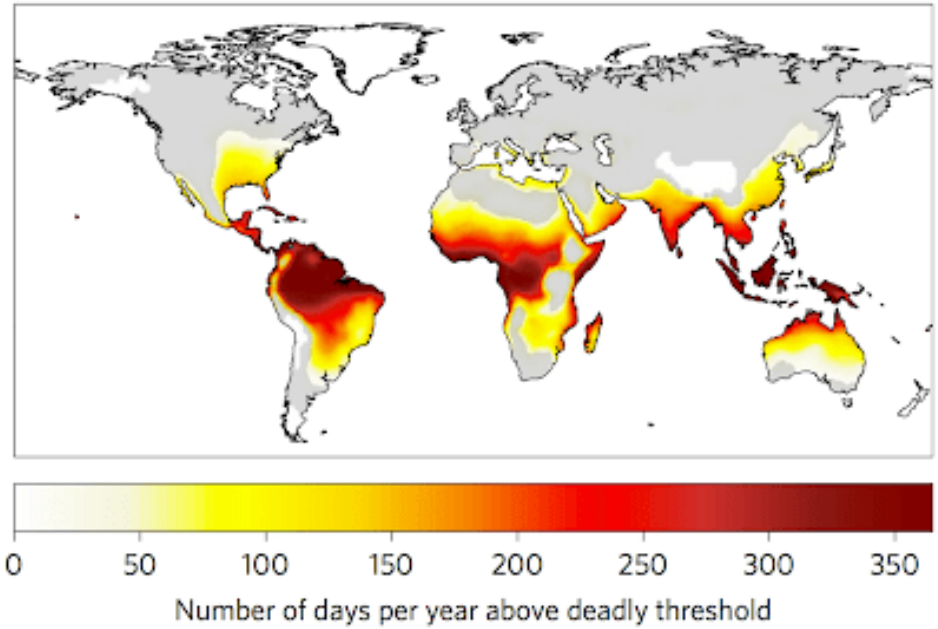
Economically, the world's major economies could lose around 20% of their GDPs by mid-century due to the mounting impacts of climate change, leaving them **less able to invest in adaptation measures.** And adaptation will be critical: Food production will drop, fresh water sources will dry up, cooling costs will soar, and thousands of miles of dikes will need to be built.

Socially, many equatorial countries may disappear in coming centuries due to extreme heat; history's largest migration wave is on the horizon.

Historical (1995-2005)



The year 2100 in a 4-5C world



Source: Global risk of deadly heat | Nature Climate Change

OUR REACTION TO-DATE

We’ve seen this coming for a long time.

Don’t look up

Our inability to stop climate change so far, combined with the growing impacts of climate change, and the constant weight of climate disinformation has led to a pervasive climate anxiety — **an ecological fatalism that is now feeding climate policy retreat and paralysis**.

Today, some prominent voices in our community are even more inclined — as Bill Gates did in his recent memo — to note that in a world of dwindling resources, we should focus more on helping people cope with the coming changes than on trying to stop these changes from happening.

The fatal flaw in this logic is that the coming changes will be survivable. Civilization may not end, but simply ignoring the reality we’re facing should be unthinkable to us all.

We’ve known about CDR for a while

The clear need for (and logic behind) CDR been clearly spelled out in IPCC reports since the early 1990s. But back then, we thought we could save our planet by setting emission targets—hence an endless parade of emission-reduction policies. So went the logic, reduce now, and then by around 2050 we can deploy some nominal amount of CDR to mop up emissions from hard-to-abate industries. By this point, we’ll be at around 1.5C and all will be well.

But haven’t acted

Governments have largely waited on the sidelines with regard to developing CDR, while markets have struggled to invent the science, deploy pilot solutions, raise financing, and solidify demand. The world’s total spending on CDR to-date—only $10-$15 billion, which includes both government and private investment—**is about the same as New York City spends in one 5-year period on road repair**.

And now we’re way short

This kick-the-can approach hasn’t worked.

The CDR market just passed a milestone of 1 **million** tons of CO2 removed to-date. However, we need to be remove **at least 10,000 times this amount ANNUALLY—nearly 10 gigatons of CO2 every year—**starting in only a few decades, according to the most recent State of CDR report (and other reports), and continue at this pace for centuries until global temperatures are stabilized, or maybe only for decades if we’re somehow able to scale our removal capabilities even higher.

More realistically, we’ll need to think in terms of removing 50 gigatons annually or even more, unless we realistically expect for this to be a centuries long mitigation effort (which will only be possible if climate conditions don’t worsen much more).

And still not serious

- Even our progress numbers are **misleading**. Biochar accounts for most of the 1 million tons of CO2 removed to date, and it doesn't remove additional CO2 (the biomatter isn't planted exclusively for CO2 removal). Also most of this removal was funded by Microsoft, which recently announced plans to curtail its CDR investments.
- Many companies and countries are **cheating** with their net zero calculations—e.g., counting existing sinks as offsets.
- The **US political** climate has turned against climate and energy investment.
- Governments are still treating this as an **industry challenge**, not a problem for society to address.

THE GOOD NEWS

CDR works

CDR works

We know from studying the geological history of our planet that CDR works exceptionally well. Natural carbon sinks are still operating all around us. And during the long history of the earth's warming and cooling, CDR mechanisms like algae blooms in the ocean and rock weathering along coastlines have played major roles in pulling our planet back from "hothouse" states.

We have options

There are many options available, with varying degrees of cost, tech readiness, removal potential, and reversability risk. The following table outlines some of these options:

Approach	Long-term system cost	Removal potential	Readiness	Political palatability
Afforestation / reforestation	$	Medium–high, but land-limited and low permanence	High	High
Soil carbon management	$	Medium, but difficult to verify and maintain	High	High
Enhanced rock weathering	$$	High (if mining and transport can scale) but slow (decades-long)	Medium	Medium
BECCS	$$$	High, but constrained by sustainable biomass	Medium–high	Low–medium
DAC + storage	$$$	Very high in principle	Medium	Medium
Ocean alkalinity enhancement	$$–$$$	Very high in principle, but highly uncertain system impacts	Low	Low
Future systems like solid conversion	$	Extremely high	Very low	Extremely high

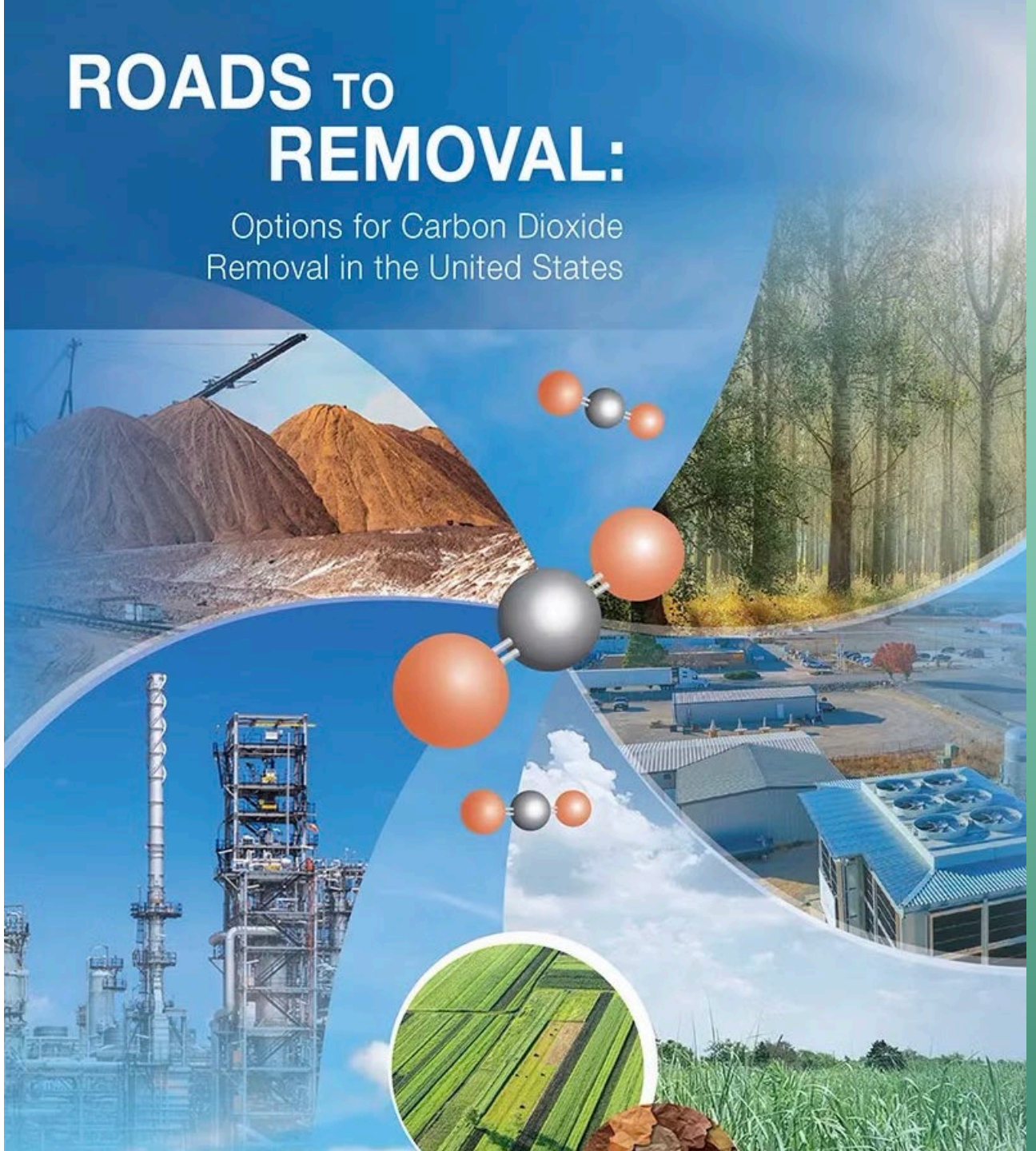
Cost key:
$ = primarily land-management or distributed operating costs
$$ = substantial material, logistical and monitoring systems
$$$ = major industrial, energy, transport and storage infrastructure
"Removal potential" refers to plausible long-term physical scale, not necessarily what can be deployed sustainably or politically. The readiness and potential assessments broadly reflect the 2026 *State of Carbon Dioxide Removal* and the IPCC's comparison of biological, geochemical, ocean and engineered pathways.

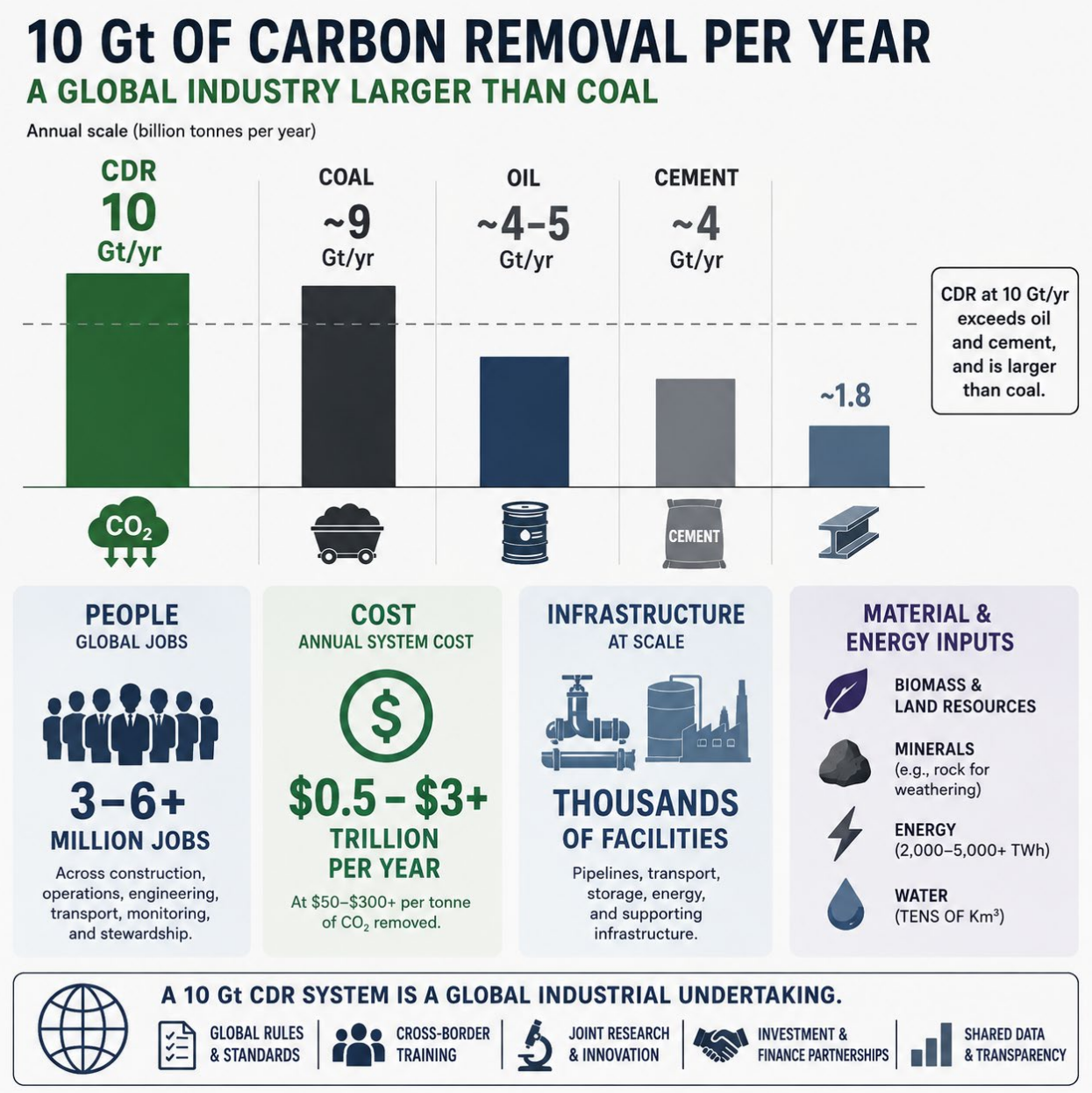
Direct Air Capture

Of all these options, Direct Air Capture is getting the most attention at the moment. It is reasonably advanced in terms of technological readiness, already being deployed around the work at minor scale, and has a high potential for carbon removal—enough to get us most of the way to 10 Gt/year. The operational costs might be astronomical, however, given the current state of this technology—likely several trillion dollars to construct and operate enough facilities.

Likely a basket approach

Because there is so much variation in terms of which CDR solutions will work best in each region, and what different regions will be willing to support (politically and financially), our global approach to CDR will likely involve **deploying many different solutions**. Over time, as more evidence accumulates about effectiveness and efficiency, and as the marketplace matures around winning solutions, we may see a tilt toward one solution or another.

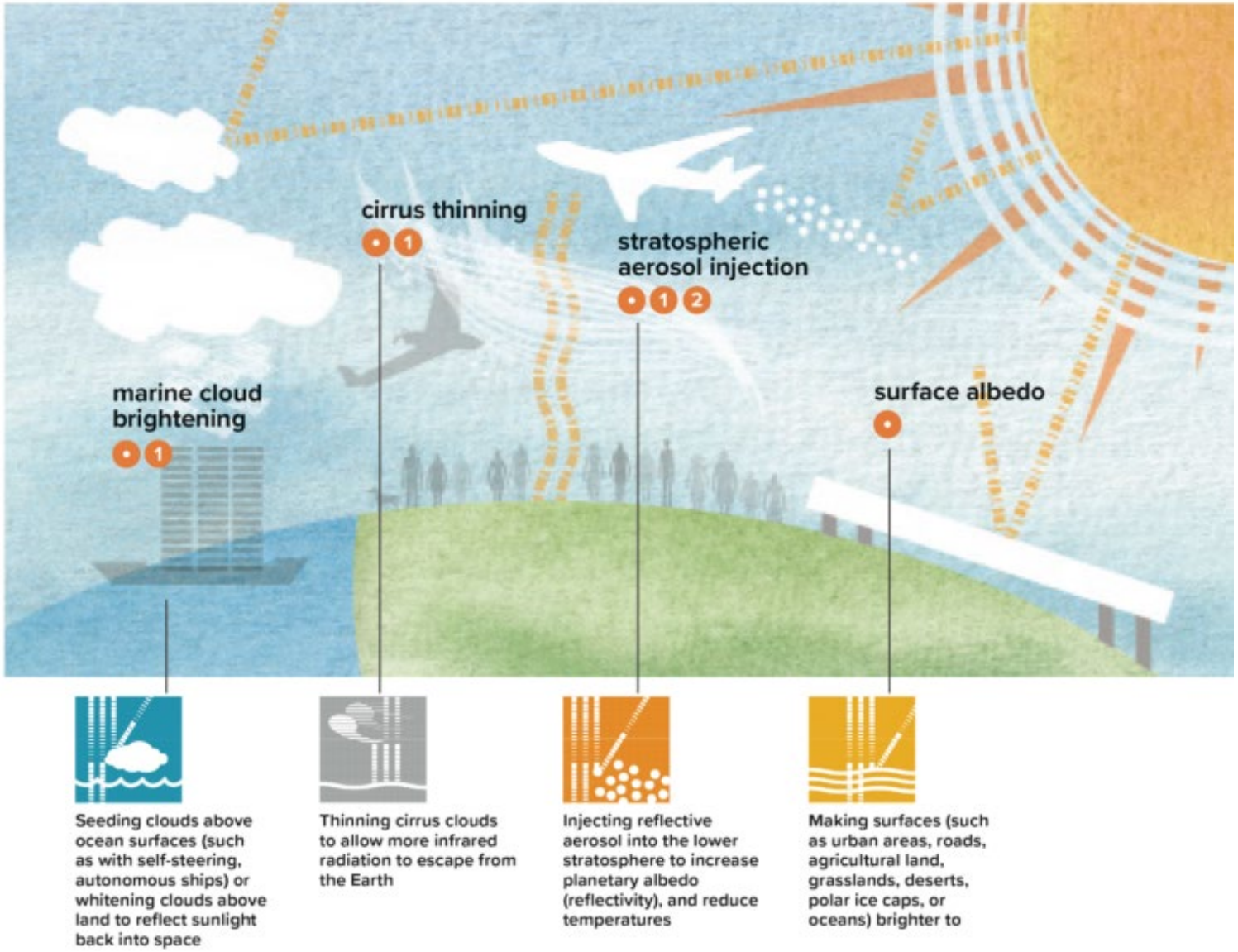




With massive international collaboration

At scale, the global carbon market will, at minimum, become larger than the global coal market in only a few decades. In the meantime, we will need global rules and standards, cross-border training mechanisms, joint research, investment and development partnerships and more, and we need all this quickly. **To achieve these goals, global collaboration and cooperation will be essential.**

Source: What We Really Mean by "The Massive Scale" Required for CDR in Climate Goals - RMI

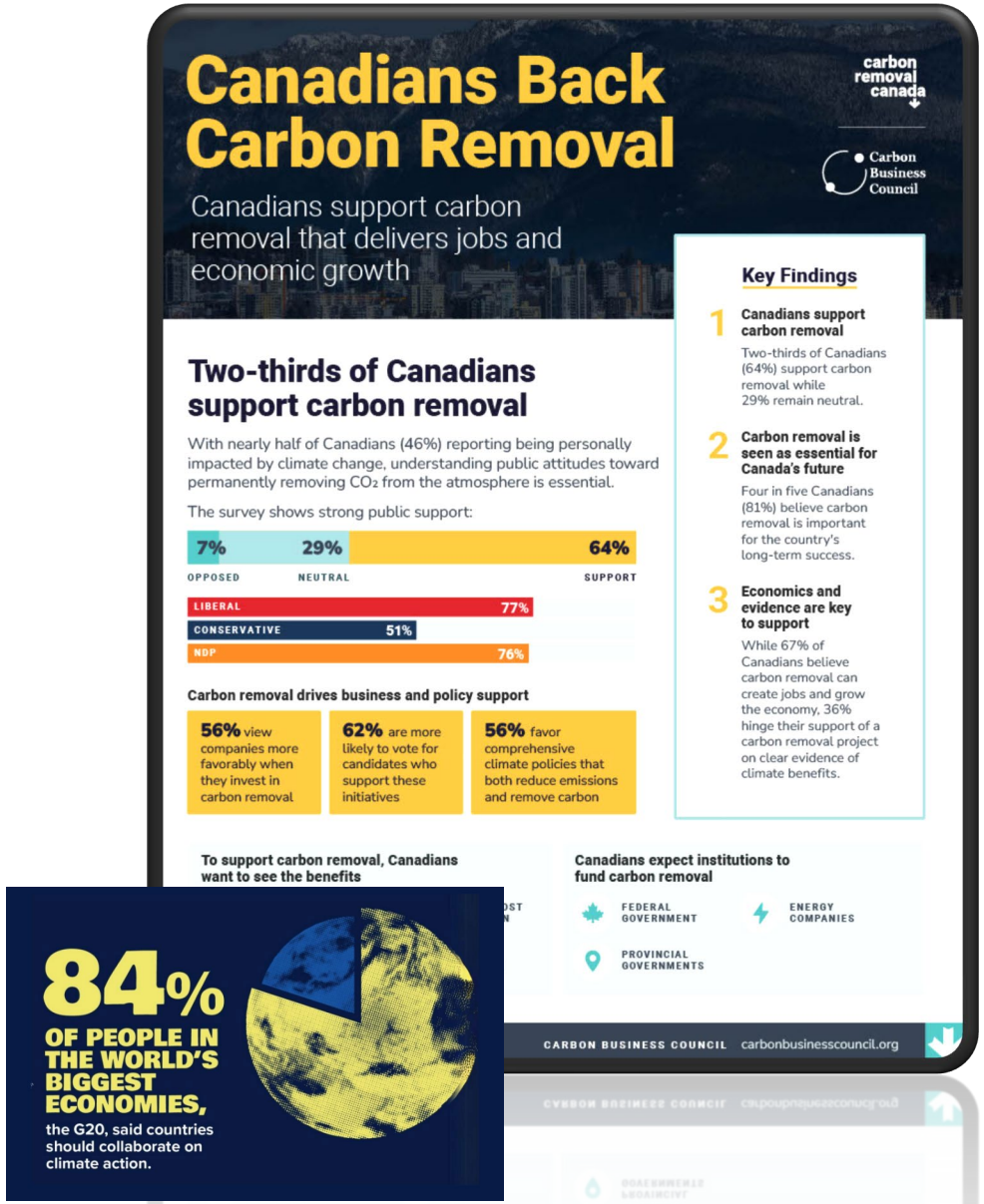


Unless

Increasing urgency will also tilt our decisions. If our cooperative, collaborative approach to solution development doesn't work, we will be forced to make radical choices to protect our planet. This will likely begin with SRM—solar radiation management measures like shooting reflective particles in the high atmosphere to help dim the sun for a few decades while we develop our carbon dioxide removal solutions. Too risky? Probably not compared to the risk of rapidly melting icecaps. These policy conversations will begin to figure prominently if we delay action on CDR for much longer (many argue it's already too late and that SRM is already needed).

SOLUTION PART 1: THE 5 BASICS

Start changing the way we think and talk about CDR



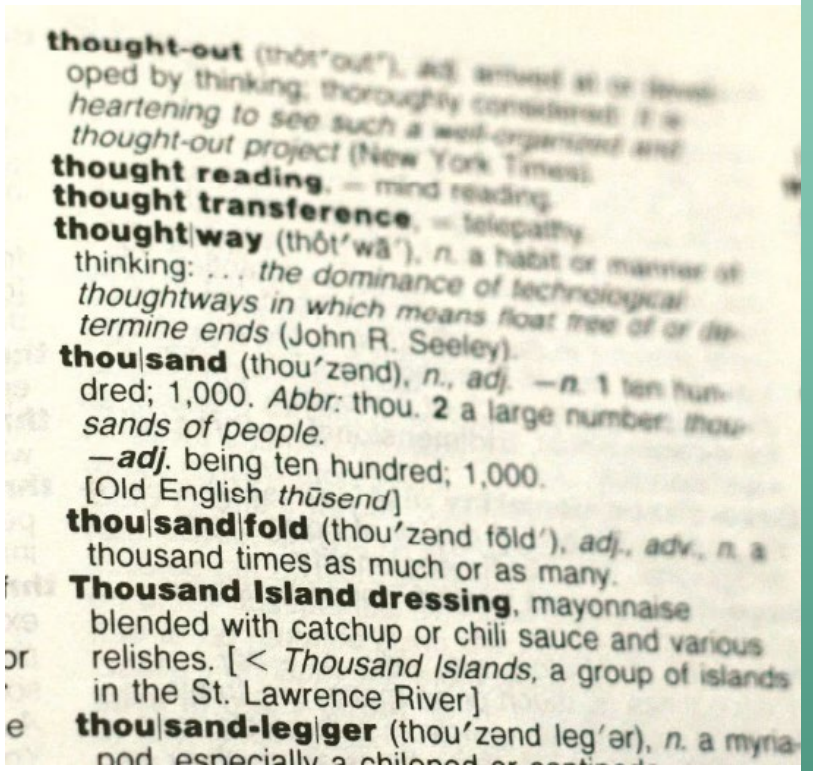
Source: The world's largest survey on climate change is out – here's what the results show | UNDP Climate Promise

1 Build political support

According to several recent surveys, the public supports bold climate action, even CDR. But there's a lingering impression in several influential corners of environmental policymaking (e.g., Al Gore) that supporting CDR is akin to endorsing geoengineering, and/or giving polluters a get out of jail free card. We need to move beyond this 1990s mindset and focus on developing the solutions needed to save our planet.

Overcoming vocabulary

Geoengineering is a 4-letter word in climate policy. It's a fairly recent term, but one that is closely associated with giving oil companies a "get out of jail free card." In truth, geoengineering is the new normal. On a geological time scale, our planet's climate has never been stable, and if we want it to remain hospitable to human civilization over the long term—eons, not decades—then we need to develop the capacity to smooth out normal fluctuations that would otherwise result in our death and/or destruction. At present, our geoengineering solution set mostly consists of SRM. **CDR is not considered by most climate scientists to be geoengineering**—it's more akin to pollution abatement, which is why the UNFCC classifies CDR as a mitigation measure, but not SRM. But politicians and climate policy advocates still lump the two together, and oppose both CDR and SRM in tandem. This stance is beginning to change, but we aren't at the point yet where we can talk objectively and unapologetically about the need for CDR.



2 Move toward “climate repair”

At this point, it isn’t enough to simply stop carbon emissions, even if we could (and realistically, we won’t). We need to **remove the legacy pollution** from our atmosphere if we actually want to **stop warming and restore temperatures** to more historic levels.

We need to do this because staying at 1.5C is not an option. Indeed, by the time CDR is scaled to high enough levels, we could easily be at 2C or higher. Our new goal needs to be **climate repair,** and CDR is the only way to accomplish this.

CDR is the only credible pathway back to normal

In October of 2025, UNEP announced that there is **no credible pathway** for staying below 1.5C without CDR. But there is still resistance, stemming from the fact that for years, CDR has been portrayed as a “get out of jail free” card for oil companies. The time has come to move past this mindset. Most Paris Agreement emissions targets are not being met, and in the meantime, **the legacy pollution** that has accumulated in our atmosphere will continue driving global temperatures for centuries to come. Without CDR, all the emissions reductions in the world won’t save us.

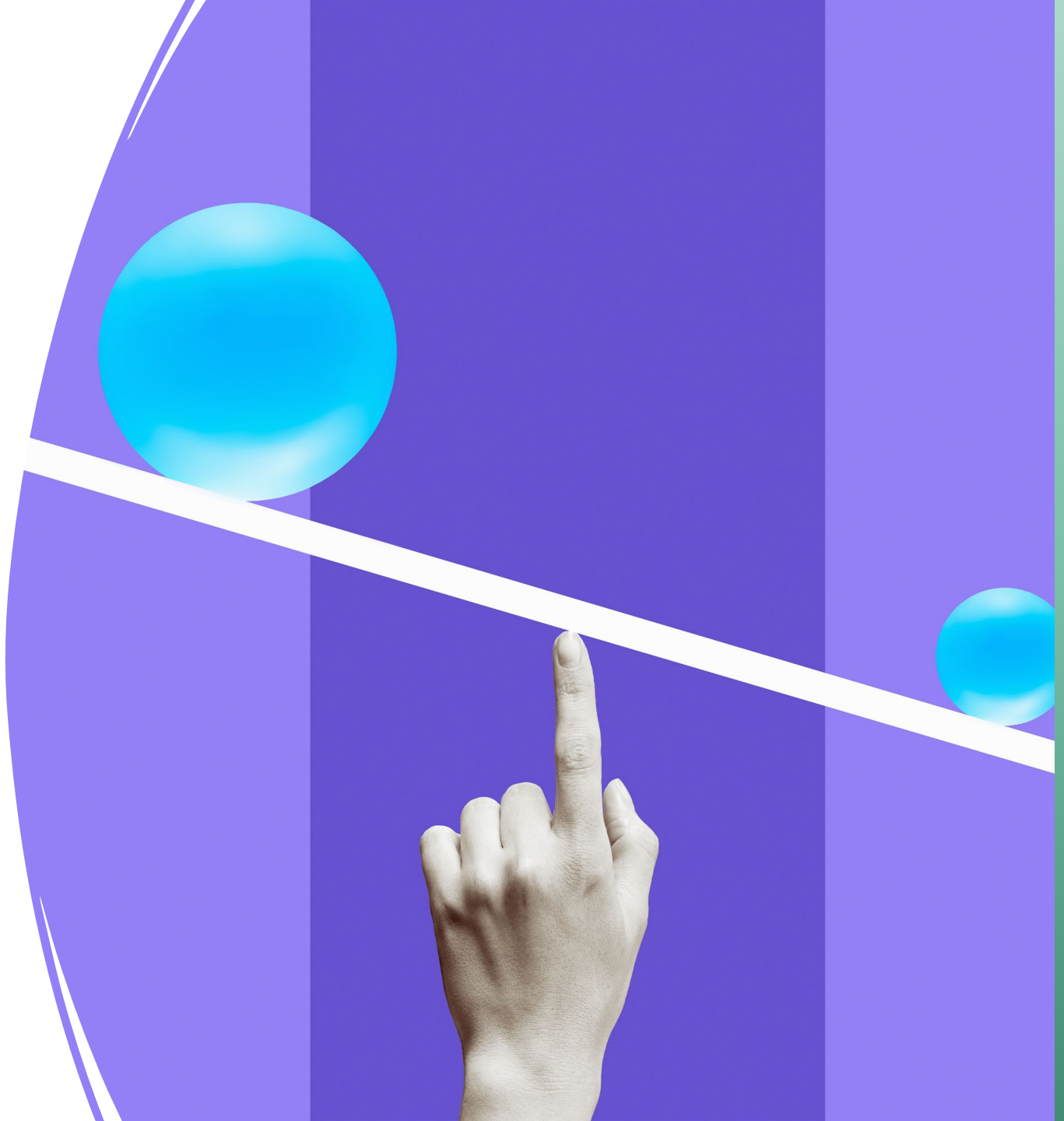
3 Talk responsibly about the upsides

We should also expand the dialogue (responsibly) from continually talking about CDR as a Trojan horse—from focusing only the challenges and costs of CDR—to **appreciating CDR's potential benefits,** particularly relative to our looming climate risks, such as helping us:

- **Reach net zero** goals more quickly and reliably
- **Improve the verifiability** of removals (relative to accounting gimmicks like offsets)
- **Remove accumulated** waste from our atmosphere
- **Spur growth** of industries with huge employment potential
- **Salvage livelihoods** like fishing, mining, and logging
- **Save cities**, cultures, and ecosystems from the coming ravages of climate change
- **Ease transition** away from fossil fuels (if need be)
- **Reduce adaptation spending** in the coming decades.

Talk about how CDR puts net zero in reach

We aren’t anywhere close to achieving our net zero goals, and reaching net zero is a first step in reducing the damage being caused by warming temperatures. Adding CDR to our climate policy portfolio helps us get there quickly and reliably. To the reliability issue, our current net zero efforts are beset by fraud— accounting gimmicks using carbon offsets and avoidance that are doing nothing to actually reduce or remove carbon emissions.



Talk responsibly about the math of adaptation

If we only focus on adaptation, which is the least controversial thing we can do to prepare for the future, **we will spend the next hundred generations** on earth struggling for existence with a hostile and permanently changed climate. Most major cities will be underwater, and many equatorial countries will disappear entirely. By contrast, if we work together now to solve the problem, we not only save our climate and human civilizations that depend on it, but we also create millions of new jobs. This shouldn't be a hard decision, and yet it is.

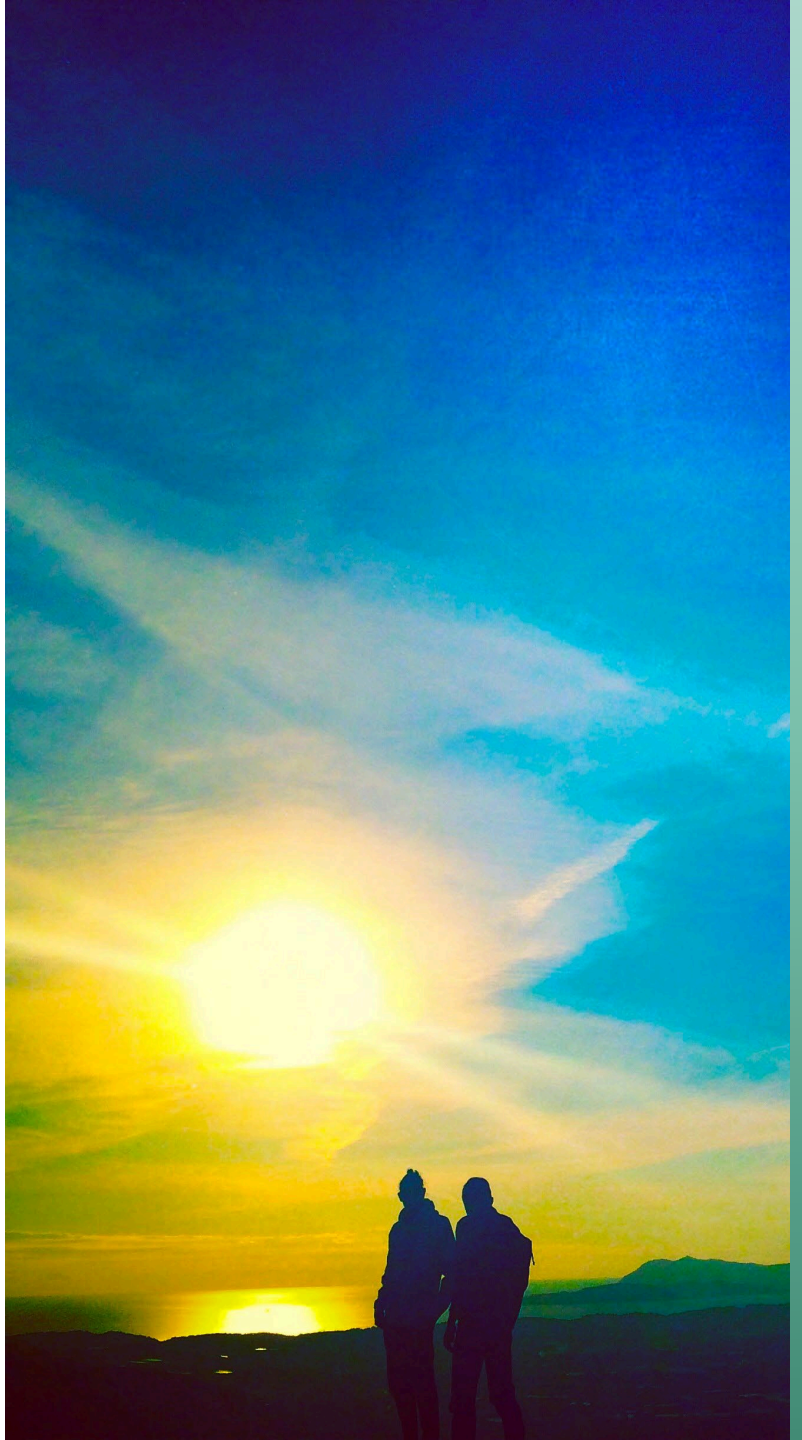
4 Government-led

Any realistic plan to quickly and massively scale the CDR industry needs to understand that **government involvement has always been historically critical for such efforts**. Markets alone won't be able to do this.

Governments have always played a critical role in helping the private sector deploy and scale massive infrastructure projects with social benefit foundations, from railroads to highways, ports, sanitation systems, the electrical grid, the internet, vaccines, and more. CDR is no different in this regard.

A growing realization

- **There is growing realization** in the CDR community that the markets won't be able to scale CDR on their own without strong government leadership (both for historical reasons mentioned and also due to a weakening CDR marketplace)
- **Governments are mostly unprepared** to act quickly:
  - Responsibility for CDR rests in a variety of offices from one country to the next; there are no preexisting official channels for international coordination
  - There is also lots of policy uncertainty as countries recalibrate climate commitments. Meanwhile, policymakers can't get ahead of their political leaders on this issue, and are focused first on figuring out their domestic policy, not yet on engaging globally.



5 A new pillar

Adding CDR to our climate policy portfolio doesn't mean removing existing policy pillars like emissions reduction, energy transition, decarbonization, avoidance, and adaptation. These are all important.

Adding CDR as a new climate policy pillar will simply mean giving it much more policy attention than now.

Our current policy support for CDR is tepid at best. For example, the IPCC groups removals and reduction together under the broad heading of "mitigation." In practice, though, **reduction has received almost all our mitigation policy attention** while removals have been relegated to an afterthought (paragraph 6.4 in the case of the Paris Agreement).

New offices

As part of this growth and focus, the **institutional responsibility for carbon removals needs to become more robust and less fragmented.** Some countries employ a few CDR specialists in the environment ministry; others have industry mitigation specialists in the energy ministry; others still have no one overseeing this issue at all.

This fragmentation means there is:

- **no government-wide expertise** and influence on CDR
- **limited funding and planning** capacity for CDR
- **no shared policy**, market and regulatory language, and
- **no framework** or capacity for global coordination.

Establishing stronger and more uniform institutional structures for CDR will be essential in the coming years.

SOLUTION PART 2: ACTION

Participate in an action plan

Mati

carbon removal canada

stripe

puro · earth

44.01

Where to begin?

Hundreds of companies are already working on this challenge, as well as many philanthropies, think tanks, governments and IGOs. We need to be self-aware that creating yet another organization might only add to the noise.

Still, we're only solving parts of the policy puzzle

INITIATIVE	PRIMARY FOCUS	PRIMARY FUNCTION
Paris Agreement / NDCs	Establishing climate commitments	Establishes national climate goals and reporting frameworks
Article 6.4 Mechanism	Defining carbon markets	Creates rules for carbon crediting and international transfers
Article 6.8 Mechanism	Expanding non-market climate cooperation	Identifying opportunities for engagement on climate solutions that aren't necessarily market-based
COP Process	Climate diplomacy	Negotiation, consensus-building, and political coordination
Mission Innovation	Supporting clean energy innovation	Accelerates research, development, demonstration, and deployment across multiple sectors
Mission Innovation – CDR Mission	Supporting CDR innovation	Advances CDR RD&D, demonstrations, and early deployment
Climate High-Level Champions	Signaling climate ambition	Mobilizes non-state actors and political momentum
Carbon Management Challenge	Catalyzing carbon projects	Accelerates carbon management projects, investment, and deployment pathways
UNEP	Policy support and capacity-building	Provides assessments, technical assistance, and convening support
IPCC	Scientific assessment	Assesses climate science, mitigation pathways, and removals
CTCN (UN Climate Technology Centre & Network)	Technology assistance	Supports technology transfer and technical assistance projects
GONE (Group of Negative Emitters)	Political leadership on removals	Encourages countries to pursue negative emissions pathways and demonstrate ambition
The Santiago Network	Climate risk assessment	UN body that pools funding and expertise to help countries assess climate risk and develop adaptation strategies.
ICVCM (Integrity Council for the Voluntary Carbon Market)	Regulating carbon markets	Establishes quality standards affecting voluntary-market CDR credits

We’re missing the big picture

There is single unifying goal for this work, no much needed government mobilization effort, and no institutional “connective tissue” that can enable widespread government-to-government cooperation.

And we’re missing the urgency

We’re still treating carbon dioxide removal like it’s optional — like removing 10 Gt/y by the year 2050 would be nice, but only if we first get emissions under control and make sure we address our adaptation needs. This approach is like fighting a forest fire by (1) planting fewer trees that might burn, and (2) making sure we all have masks to make breathing easier. The immediate and urgent problem is the fire itself — the excess CO2 already in our atmosphere. We need to start putting this out, and quickly.

Therefore, CDRANet

Between October of 2024 and May of 2025, we (the Science Communication Institute) brought together **275 high-level experts in climate policy and climate research**, plus industry leaders, environmental leaders, and government policy officials (representing over 200 institutions from 36 countries) online to debate what a coherent, unifying global policy for CDR should look like. We named this group CDRANet, which stands for the CDR Action Network.

CDRANet's solution

This discussion plus a year of follow-up with high-level subgroups of CDRANet resulted in the development of an agreement named **The Vancouver Declaration** (in recognition of the city where this will be signed in 2027).

A first for CDR

The Vancouver Declaration and the process that embodies it, called the Vancouver Process, is the first major global effort **to focus solely on the challenge of carbon removal.**

It is also the first major effort **treating carbon removal as a key pillar** in our fight against global warming, not an afterthought addition to an existing policy.

This isn't the only approach we might want to take, but it's the only one at the moment that focuses on CDR. If another approach emerges, we should hop on whatever train offers us the most realistic hope of actual action and not just another multi-decadal exercise in avoiding obligation.

Vancouver Process

Over the next several years, countries will share lessons of experience on CDR, build bridges for cooperation, and actively work together on the policies and actions that will drive the future of CDR. **Nine governments are currently involved**; more are expected to join over the coming months. There is no other forum like this. There are one-off regional and global efforts to help spur industry innovation and investment, but no other effort that brings governments together in this cause. In this respect, the Vancouver Process is critical to the future of our planet.

VANCOUVER PROCESS

SOLUTION PART 3: TAKING ACTION

The road less traveled (so far)

No more decades-long debates

The coalition of countries and IGOs who participate in the Vancouver Process—or whatever solution emerges that brings countries together in common cause on CDR—will need to understand what's at stake and will work together to decide how to quickly scale this effort in the best way possible. **We don't have the luxury of spending 30 more years debating whether to do this and how.** We have enough expertise, know-how and commitments to get underway and learn more as we go. All we need now is the organizing structure.

Only the beginning

This early movement will be only part of what needs to happen, and will mark only the beginning of a **decades-long journey (or possibly centuries-long journey) to unite countries in common cause to save our planet.** Much will need to change along the way: public opinion about climate change, public support for CDR, policy focus, massive funding, a CDR industrial revolution, accelerated international cooperation, and more. Step one is vital, but it's still only step one.

The future

- **Global CO2 concentrations stabilize**
- Over time, **we begin drawing down CO2 concentrations**, establishing a credible route for **restoring our earth's climate** to its natural conditions
- **Climate-related suffering drops** while climate-stabilized prosperity grows
- By creating more pathways to lowering temperatures, **we reduce eco-fatalism and attract more enthusiasm and engagement** for participating in climate policy.
- We establish a **robust new global carbon removal industry** and start to reap its economic benefits
- **We create strong new pathways** for polylateral cooperation on other issues

Questions & additional information

For additional information, please visit the Vancouver Process website at https://vancouverprocess.org, and also the CDRNet website at https://cdranet.org. For questions, please email Vancouver Process interim secretary Glenn Hampson at ghampson@vancouverprocess.org.

ANNEX

The Vancouver Declaration

Governments may elect to sign this, signifying their resolve to work together in common cause on CDR

Our planet's climate is changing rapidly. Rising temperatures are altering the natural systems that support life, human society, and our global economy. To confront these changes with the urgency and effectiveness they demand, we must complement our carbon dioxide *reduction* efforts with carbon dioxide *removal* (CDR) as soon as possible.

The best available science supports this approach:

- Over the past decade, the average near-surface temperature of our planet has been higher and rising faster than at any other period in human history. We will be unable to stay below the warming limits established by the 2016 Paris Agreement (wherein governments were called upon to "pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels").
- Our planet's temperature will continue rising long into the future without intervention. The social, economic and environmental impacts of this warming are already severe, and will intensify unpredictably over the coming years and decades.
- Greenhouse gases—especially carbon dioxide—are the main drivers of warming. A legacy of carbon dioxide pollution has accumulated in our atmosphere, especially over the past two centuries, and will continue to trap heat for generations.
- Reducing carbon dioxide emissions remains an essential part of our long-term climate strategy, but *reductions* alone will not be enough to regulate temperatures. The United Nations' Intergovernmental Panel on Climate Change has advised for decades that carbon dioxide *removal* must also play a critical role.

Scaling our CDR capabilities as soon as possible will help us limit the changes happening to our climate. However, these capabilities are still emerging, and refining and expanding them will require significant international cooperation. Much care also needs to be taken with regard to complex issues such as safety, efficiency, integrity, ethics and accountability. For these reasons, *intergovernmental* cooperation—not just international cooperation—is especially important, given the unique abilities and historic roles of governments in rapidly scaling major infrastructure systems such as CDR that serve the public good.

Therefore, by this Declaration, we join in common cause with governments and government agencies and institutions everywhere to begin considering a global, intergovernmental policy framework whose purpose is to strengthen and accelerate our global CDR capabilities. Working together to the best of our abilities and in concert with existing climate policies and efforts, we endeavor to collaborate on developing new and needed intergovernmental pathways for advancing the research, finance, infrastructure, policies, tools and governance mechanisms to facilitate the urgent, responsible, and equitable removal of legacy and excess carbon dioxide from our planet's atmosphere.

We have reached a pivotal point in human history—one that calls for trust in science, global solidarity, shared responsibility, and bold, united action, without which the human experience on our planet will become uniquely challenging. By this Declaration, we choose to act now, working together, so we can protect our present, and preserve a livable future for generations yet to come.

The Vancouver Declaration Policy Framework

This part of the agreement is advisory only — a first draft for consideration, covering possible terms of engagement on issues ranging from government investment to standards development to the long-term sustainability of this effort.

Please see the CDRANet website at cdranet.org for complete details. The top 10 priorities of the Vancouver Declaration's policy framework are to:

1. Position CDR as a core pillar of climate action.
2. Strengthen government leadership in early action, infrastructure, investment, and reform.
3. Create a globally coordinated CDR system.
4. Advance next-generation markets and financial tools.
5. Establish credible global MRV standards.
6. Harness the economic benefits of CDR.
7. Apply a balanced, risk-informed policy lens.
8. Center equity, public engagement, and legitimacy.
9. Support innovation with integrity safeguards.
10. Ensure CDR reinforces—not replaces—emissions reduction.

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Thank you!

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