



THE EARTHSHOT PRIZE

Positive Tipping Points: **Accelerating system change** **to repair our planet**

Summary



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Foreword

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Most environmental policy assumes that change is gradual and proportional: bigger problems need bigger budgets, and progress will be slow and linear. The science of tipping points tells a different story. Many of the systems we depend on – ecosystems, markets, technologies, social norms – can shift abruptly once a threshold is crossed, with reinforcing feedbacks then driving change without continued external push.

The latest climate science tells us that Earth's systems are approaching negative tipping points — thresholds where damaging shifts, like coral reef collapse or Amazon dieback, become locked in and difficult to reverse. Yet, the same science shows positive tipping points are also within reach. The rise of solar power and electric vehicles in leading markets are just a couple of current examples, but there are many more, at various points along the tipping point trajectory.

In order to reverse some of the damage to our ecosystems before it is too late, we would do well to understand more about the solutions with the greatest potential for 'tipping'; those positioned to unlock reinforcing feedbacks, where early adopters inspire others, costs fall with scale, ecosystems recover enough to sustain their own recovery, or new norms and policies spread from one community or country to the next.

This report synthesises five companion analyses prepared by the University of Exeter's Green Futures Solutions for the Earthshot Prize, applying the science of positive tipping points to the five Earthshots: Protect and Restore Nature, Clean Our Air, Revive Our Oceans, Build a Waste-free World, and Fix Our Climate, identifying the positive tipping points that collectively represent the best chance of repairing the planet.

Foreword

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The biggest story today is not only the pressure facing our planet; it is also the response rising to meet it.

The headlines may be dominated by the challenges, but the defining story of the decade will be one of progress. Right now, remarkable work is happening around the world to transform landscapes, ecosystems, industries, communities and cities for the better. Yet as 2030 approaches, a critical moment for our planet's future, we need to know where this action can have the greatest impact.

This report is an important moment for us: the first time the science of positive tipping points has been applied across the five Earthshots: Protect and Restore Nature, Clean Our Air, Revive Our Oceans, Build a Waste-free World, and Fix Our Climate. It gives us a shared framework to understand where transformative change is most achievable, and what it will take to get there.

It changes the question we ask. Rather than simply asking, “Does this solution work?”, we instead ask: “Can this solution trigger exponential, self-propelling change at scale?”

This is a harder test to pass, but it is one that matters given the time we have left in this decisive decade. As we move closer to 2030, we will use this lens to find and back solutions with the potential to reach positive tipping points and unlock greater systems change, even if it takes a few more years to reach the final goal. The clock is ticking, and the bar is exceptionally high.

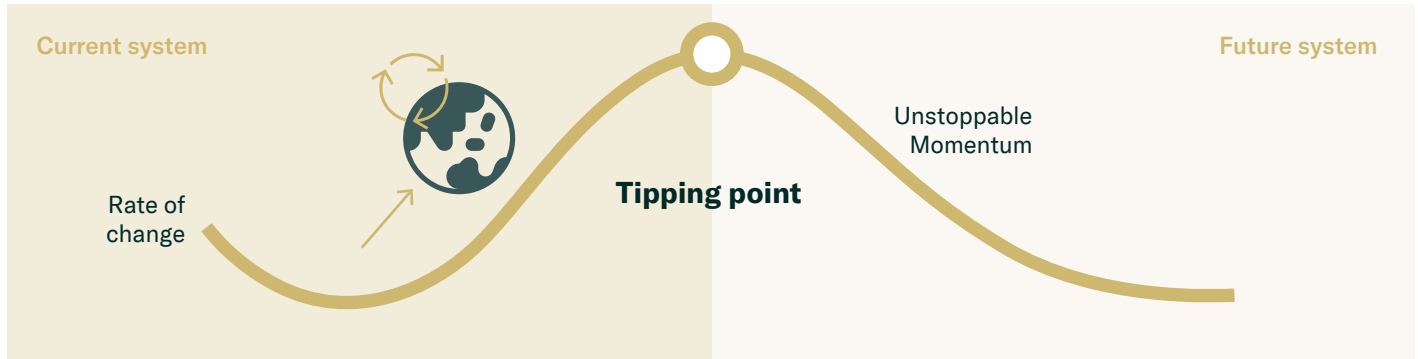
This report shows us that progress does not have to be slow or linear. With the right conditions, success can drive more adoption, investment and innovation, creating a cycle that accelerates and spreads.

We believe such change can and will be achieved while delivering economic gains, protecting and creating new jobs. This is not a journey of sacrifice but one of value creation in a smarter world.

The defining challenge of our time and the biggest story of our generation, repairing our planet, could be closer than we think. We at The Earthshot Prize will be obsessed with achieving huge impact. You can count on us to do everything we can to move the world past positive tipping points.

What is a tipping point?

A tipping point marks a threshold in a system, beyond which change becomes self-propelling. Before the tipping point is reached, progress depends on continued effort. After it, reinforcing feedbacks take over and the system re-organises on its own, often incredibly quickly.



How does it happen?

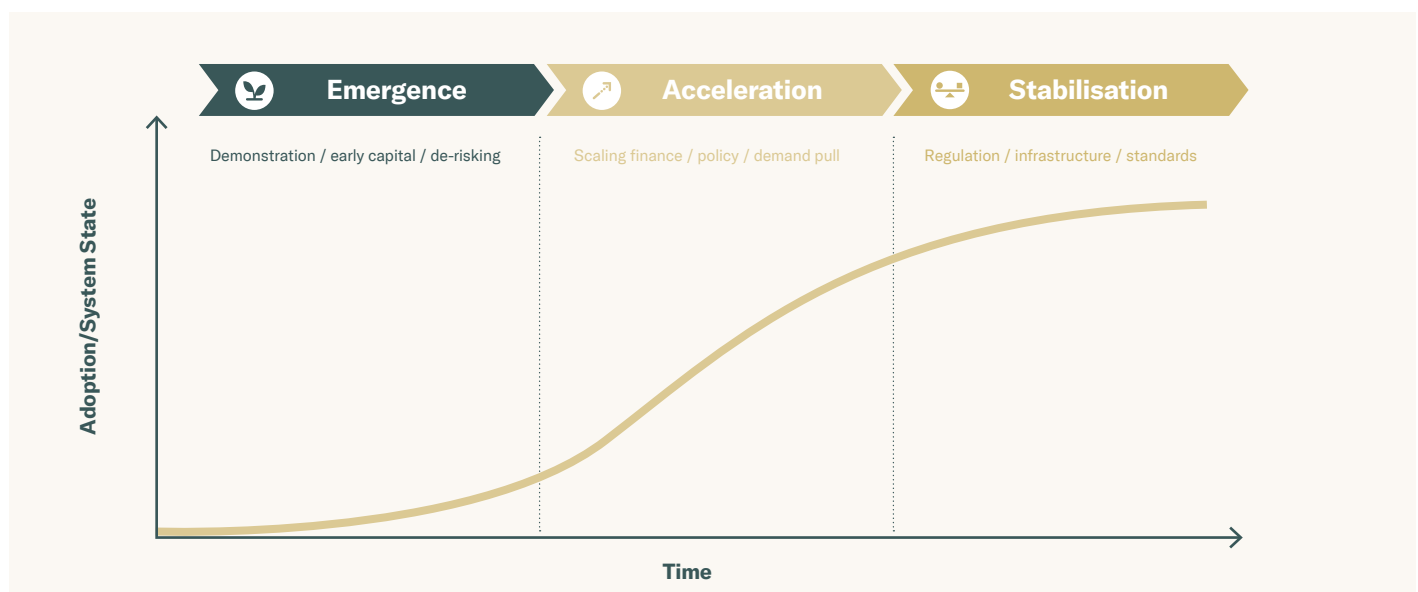
This report identifies **three enabling conditions** for a positive tipping point to be reached.

Affordability - the desired solution must be cost-competitive with the damaging incumbent.

Accessibility - it must be practically and geographically available to those who need to adopt it.

Attractiveness - it must perform well enough, with enough social proof, to make adoption the obvious choice.

There are **three transition phases** to a tipping point - emergence, acceleration, stabilisation - all requiring different kinds of support. Matching the type of support to the stage is critical to achieving a tipping point. The steep middle section, where reinforcing feedback have taken over, is where well-timed effort is repaid most quickly.



The Five Earthshots and Potential Tipping Points

The [full report](#) by the University of Exeter's Green Futures Solutions for the Earthshot Prize details over 50 different solution areas where positive tipping points can occur. This summary highlights solution areas for each of the five Earthshots and showcases the Earthshot Finalists, and Finalist clusters, whose work is helping us to move closer to positive tipping points.

Critically, Earthshot Finalists span every sector and geography. This breadth is not incidental — positive tipping points accelerate when momentum compounds across industries, supply chains and regions at once. Our diverse portfolio of Finalists help create the conditions for such cross-cutting systems change, with many of our Finalists creating impact across multiple Earthshots.



**Protect &
Restore Nature**



Clean Our Air



**Revive Our
Oceans**



**Build A Waste-
Free World**



**Fix Our
Climate**



**Protect and
Restore Nature**



This Earthshot sets a clear ambition that **the natural world should be growing, rather than shrinking**. At present, forests, wetlands and other vital ecosystems are being lost faster than they can recover, leaving up to two million species facing extinction. Yet, tipping points for nature can be incredibly effective: once they are crossed, recovery can be faster and more self-sustaining than expected.

The direction of finance will decide how fast: governments still spend an estimated \$274-542 billions a year on agricultural, forestry and fisheries subsidies that damage biodiversity (two to four times global conservation spending), so redirecting money that is already being spent is a powerful lever for tipping the solution areas detailed below.

One big area with potential to tip is **sustainable commodity supply transformation**. Agricultural expansion for beef, soy, palm oil, timber, cocoa and coffee is the single largest driver of tropical deforestation worldwide, accounting for around 70% of tropical forest loss. Yet, as global supply chains are incredibly concentrated, a huge opportunity exists for co-ordinated action by a critical mass of

buyers, financiers and regulators to implement forest-friendly sourcing standards, which would restructure economic incentives for millions of producers. Our 2023 Earthshot Finalist, **Belterra** is active in this area, working with smallholder farmers in Brazil on regenerative agricultural practices and creating market incentives for sustainably-grown crops.





Another key area is the **protection of intact and high-integrity ecosystems**. Keeping the world's last untouched forests, peatlands, wetlands and grasslands standing is far cheaper, faster and more reliable than restoring them later. Central to tipping this area is making these ecosystems worth more intact than felled. One of several of our Finalists advancing this is the **Tropical Forest Forever Facility** (2025), the most ambitious forest protection fund in history, which aims to raise \$125 billion to pay countries to keep their forests standing. Meanwhile, our 2026 Finalist, the small Himalayan kingdom of **Bhutan** has written nature's protection into its constitution, safeguarding the water systems that sustain 1.6 billion people downstream across South Asia and deliver \$14.5 billion in ecosystem services every year.

Yet, **restoring degraded forests and landscapes** with the communities who depend on them is another crucial area that could soon reach a positive tipping point. Over 60 nations

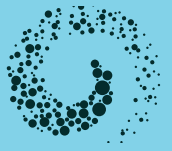
have pledged around 230 million hectares of restoration towards the global goal of 350 million hectares by 2030, and a cluster of Earthshot Finalists are making important progress against this target. **Accion Andina** (2023 Finalist) is restoring high-Andean landscape critical to water security and biodiversity through community-led action. **The Republic of Costa Rica** (2021) has expanded its world leading Payments for Ecosystem Services model, from forests to mangroves and coastline protection, paying local communities to conserve and manage these vital sites. Meanwhile, **re.green** (2025) uses AI and satellite data to pinpoint where restoration will have the greatest impact, enabling the profitable restoration of the Amazon and Atlantic Forests at scale.



Solution area	Description	Phase	How it could tip	Finalists working in this area
Sustainable commodity supply transformation	Making beef, soy, palm oil, timber, cocoa and coffee global trade deforestation-free	 → 	Major markets agree on deforestation-free sourcing, making it the default market standard	Belterra (2023)
Protection of high-integrity ecosystems	Keeping forests, wetlands and grasslands intact		Once intact ecosystems are worth more standing than cleared, protection becomes rational default	Costa Rica (2021) Pole Pole Foundation (2021) Hutan (2022) Accion Andina (2023) NatureMetrics (2024) Amazon Sacred Headwaters Alliance (2024) Altyn Dala (2024) Tropical Forest Forever Facility (2025) Bhutan (2026) Yellowstone to Yukon (2026)
Freshwater ecosystem-based adaptation	Using healthy rivers, wetlands and catchments to cut flood and drought risk		When utilities and insurers price natural flood management below built flood infrastructure it becomes the new standard	Bhutan (2026)
Peatland and wetland restoration	Re-wetting drained peatlands so carbon is locked in and wildlife recovers		Restored peat becomes self-sustaining, and carbon/biodiversity finance covers the costs it scales without subsidy	
Forest and landscape restoration	Restoring degraded areas to biodiverse, healthy life alongside their communities	 → 	Global commitments, carbon markets and supply-chain demand reinforce each other, making restoration financially self-propelling	Costa Rica (2021) Restor (2021) Accion Andina (2023) Belterra (2023) Re.Green (2025)
Keystone species reintroduction (trophic rewilding)	Returning species, like wolves, bison and beaver, that re-engineer whole ecosystems		Keystone species like wolves, bison and beavers allow entire ecosystems to recover, and visible recovery builds public and political support	Altyn Dala (2024) Yellowstone to Yukon (2026)
Sustainable and regenerative agriculture and agroforestry	Farming that rebuilds soil, biodiversity and water security		When subsidies flip toward regenerative practice and peers prove yields hold, farmers both adopt and promote the practice	Kheyti (2022) Desert Agricultural Transformation (2022) Belterra (2023)
Community-based resource governance	Recognising the rights of local / indigenous communities to manage their ecosystems	 → 	As recognising tenure improves outcomes at lower cost, it sets a political precedent and community rights become the norm	Pole Pole Foundation (2021) Amazon Sacred Headwaters Alliance (2024) The Tenure Facility (2025) Indigenous Desert Alliance (2026)
Fire-managed savannah and grassland ecosystems	Restoring skilled, often Indigenous, fire management to protect savannahs		When carbon finance rewards cool-burn stewardship, Indigenous fire management rapidly scales	Indigenous Desert Alliance (2026)
Urban green infrastructure	Cooling and improving cities with trees, parks, green roofs and corridors		As heat, air-quality and stormwater benefits are priced into planning codes, green infrastructure becomes a default development requirement	City of Freetown (2023)



Clean Our Air



This Earthshot carries the most direct human health mandate: **everyone breathing clean air**. Currently, the World Health Organisation (WHO) attributes around seven million premature deaths annually to air pollution, the world's largest environmental health risk. Yet, air pollution holds a unique place across the five Earthshots, in that many solutions aimed at improving climate, nature, waste and oceans have the added benefit of improving air quality, increasing the chances for positive tipping momentum.



One of these solutions is **clean household energy and buildings**. Polluting cooking and heating fuels are the world's largest single source of fine-particle exposure, with 2.1 billion people still using them. Replacing these with clean household energy could cut harmful emissions by at least 80% and reduce premature deaths from household air pollution. Pay-as-you-go business models, plus the expansion of rural electrification,

are making this a reality in several markets, as shown by several of our Finalists, including **d.light** (2024), which is giving 200 million people across Africa access to affordable solar energy and **Mukuru Clean Stoves** (2022), which provides cleaner-burning stoves using processed biomass.



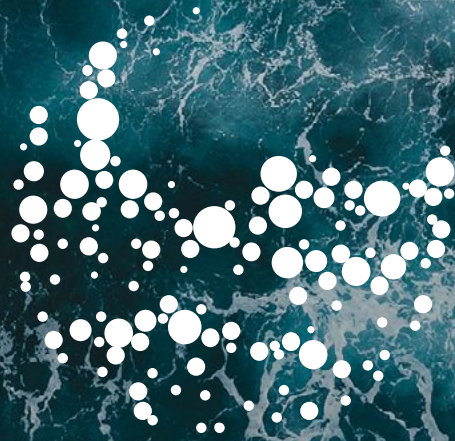
Another area close to tipping is **air quality governance**. The laws, monitoring networks and public demand around clean air are the enablers that make every other clean-air solution actually stick. Low-cost air quality sensors are helping to make pollution visible and attributable everywhere; this visibility then creates accountability pressure; pressure produces stronger standards; standards improve air quality; and visible improvement builds support for further ambition – locking in continuous improvement. We have a number of Finalists working to improve air quality in their markets and beyond. China’s **Blue Map App**, our 2021 Earthshot Finalist, is making real-time industrial pollution data accessible to the public. **Polish Smog Alert** (2023) is driving policy change in Poland through advocacy and citizen engagement, and the **City of Bogotá** (2025) has implemented bold policies to cut air pollution by 24 percent since 2018. Our 2026 Finalist **AirQo** is Africa’s largest air quality network across 16 cities, serving more than 30 million people and helping to shape policies across the region.

As transport is the main source of many harmful pollutants in cities, **clean mobility systems**, like electric vehicles, better transit and low-emission city zones are key to achieving cleaner air for large city populations. Our 2022 Finalist **Roam** is scaling affordable electric mobility solutions specially tailored to African cities, while the **City of Guangzhou** (2025) has electrified tens of thousands of buses and taxis, improving air quality for its 24 million citizens. In India, **Mahindra Last Mile Mobility** (2026) has sold 400,000 electric last-mile vehicles, in a country where last-mile vehicles are the largest source of roadside air pollution.





Solution area	Description	Phase	How it could tip	Finalists working in this area
Clean household energy and buildings	Replacing polluting cooking and heating fuels with clean alternatives	 → 	Pay-as-you-go clean cooking plus rural electrification crosses the affordability threshold, making clean cooking the cheaper default	Vinisha Umashankar (2021) Mukuru Clean Stoves (2022) D.Light (2024)
Air quality governance, monitoring and social tipping	Bolstering the laws, monitoring networks and public demand that make every other clean-air solution stick	 → 	As cheap sensors make pollution visible everywhere, public accountability forces standards that lock in continuous improvement	Blue Map App (2021) Polish Smog Alert (2023) City of Bogota (2025) AirQo (2026)
Climate-resilient health systems and the air-heat-health nexus	Preparing health systems for heat, ozone and smoke together		When health systems routinely attribute and act on air-and-heat mortality, the health case makes clean-air investment politically unavoidable	
Clean electricity and combustion phase-out	Phasing out coal power in favour of clean electricity		Renewables undercut fossil generation, so retiring combustion becomes the economic default	Ampd (Enertainer) (2022)
Clean mobility systems	Cutting traffic pollution through electric vehicles, better transit and low-emission city zones		EV cost parity plus low-emission zones make clean mobility the default	Roam (2022) ENSO (2023) GRST (2023) City of Bogota (2025) City of Guangzhou (2025) Mahindra Last Mile Mobility (2026)
Agricultural pollution and methane abatement	Reducing ammonia and methane from farming through better fertiliser and livestock management		Once nitrogen-use efficiency and methane capture pay for themselves, cleaner agriculture becomes standard	
Waste system tipping: end open dumping and burning	Ending open waste dumping and burning, one of the most directly harmful sources of air pollution		When basic collection and controlled disposal reach coverage, open burning stops	Takachar (2021) MYCL (2024) Green Africa Youth Organisation (2024)
Industrial clean production and continuous monitoring	Cutting industrial pollution by requiring the best available clean-production methods and monitoring	 → 	As best-available-technology (BAT) standards and continuous monitoring spread to emerging economies, clean production becomes the global baseline	Gujarat (2025)
Wildfire smoke and Indigenous fire stewardship	Reducing wildfire smoke through Indigenous-led fire management		Cool-burn stewardship and fuel management, backed by carbon and health finance, cut catastrophic fire and its smoke at source	Satellites on Fire (2026)



Revive Our Oceans



This Earthshot sets out to repair and preserve our oceans for future generations. In tipping point terms this means **the recovery of marine ecosystems, fisheries and coastal communities**. The tipping-point science for oceans is well-established, and while many people will be aware of negative tipping points like coral reef mass bleaching, other areas are emerging with strong potential for positive tipping points.

Properly protecting and enforcing the ocean's most valuable areas through **high-quality marine protected area networks** has proven instrumental in marine life recovering and spreading, with fish biomass inside protected areas typically four to seven times higher than equivalent unprotected waters within five to ten years. We have a cluster of Finalists working in this area. The team at **Pristine Seas** (2021) has helped to create 31 of the world's largest MPAs through scientific

research and exploration, while **The High Seas Treaty** (2025) is creating the legal framework to extend protection into international waters. **Bonds for Ocean Conservation** (2025) enables countries to refinance debt and invest billions into saving our seas, while **Niue Ocean Wide Trust** (2026) has turned the cost of ocean protection into a 20-year plan the world can invest in.



Rebuilding overfished stocks, by ending illegal fishing and co-managing catch levels with fishing communities, could also reach a positive tipping point in the near future. Around 35% of assessed marine fish stocks are overexploited but an estimated half of these can recover within a decade with effective management. Several of our Finalists are focused on transforming this industry: **ABALOBI** (2023) gives digital tools to small-scale fishers to track catches and ensure sustainable fishing improves livelihoods, while **WildAid Marine Program** (2023) strengthens marine enforcement, ensuring that protected areas are effectively governed and illegal fishing stops. **Coastal 500** (2023) is a global network of local government leaders, helping to influence policies to protect climate-vulnerable coastlines.

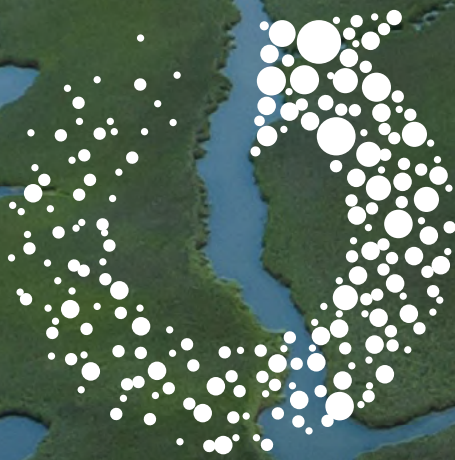


Cleaning up shipping and ports with lower-carbon fuels and better environmental controls could cut the 3% of global CO₂ emissions for which the sector is responsible. Our 2026 Finalist **ZEMBA** is uniting 50 of the world's most influential cargo owners into multi-year contracts to reduce shipping emissions.





Solution area	Description	Phase	How it could tip	Finalists working in this area
High-quality marine protected area networks	Protecting and enforcing the ocean's most valuable areas so marine life can recover and spread		Once rebuilt biomass from protected areas spills into fished waters, fishers support more protection and the network self-expands	Pristine Seas (2021) HAC / High Ambition Coalition (2024) High Seas Treaty (2025) Niue Ocean Wide Trust (2026)
Fisheries rebuilding, co-management and illegal fishing suppression	Rebuilding overfished stocks by ending illegal fishing and co-managing catch levels with fishing communities		When rebuilt stocks raise catch and income, effective management becomes self-reinforcing	Abalobi (2023) Coastal500 (2023) WildAid Marine Program (2023)
Community-led locally managed marine areas	Giving coastal communities the rights and tools to manage their own nearby waters		Visible local recovery spreads, community-by-community, until LMMAs become the regional norm	Indigenous Women of The Great Barrier Reef (2022) Coastal500 (2023) Niue Ocean Wide Trust (2026)
Blue-carbon and coastal ecosystem restoration	Restoring mangroves, salt marshes and seagrass that shelter marine life and buffer coastlines		As blue-carbon markets and coastal protection value mature, mangrove, seagrass and saltmarsh restoration becomes self-financing	Living Seawalls (2021) City of Barcelona (2026)
Climate-resilient reef systems and thermal refugia	Protecting the most heat-tolerant reefs and naturally cooler waters where coral can keep thriving		Identifying and protecting cooler waters plus selective breeding of heat tolerant coral genotypes (assisted evolution) could restore reefs at scale	Coral Vita (2021)
Kelp forest and seaweed systems restoration	Recovering collapsed kelp forests and the marine life that shelters within them		Restoring predator control of urchins lets kelp rebound, while the seaweed economy creates market pull that funds further restoration	SeaForester (2022) Coast 4C (2024)
Sustainable aquaculture transformation	Shifting fish and seaweed farming toward lower-impact feeds and species		As low-impact feeds and systems reach cost parity, sustainable aquaculture replaces wild capture and relieves pressure on stocks	MiAlgae (2024) Coast 4C (2024)
Integrated Sustainable Ocean Plans (100% approach)	Countries managing their whole ocean territory under one joined-up, sustainable plan		When shown to create long-term value, these plans become the expected standard of national governance	Niue Ocean Wide Trust (2026)
Pollution, nutrients and plastics: source-to-sea strategies	Stopping plastic and nutrient pollution at its source on land, before it reaches the ocean		A binding plastics treaty plus source-to-sea action reprices pollution upstream, cutting the ~80% of marine litter that starts on land	The Great Bubble Barrier (2022) Aquacycl (2023) Matter (2025)
Ocean finance mechanisms: blue bonds, debt swaps and blended finance	Funding ocean protection at scale through blue bonds and conservation debt swaps		As blue bonds standardise and a track record builds, ocean finance scales to unlock the solutions it currently bottlenecks	Bonds for Ocean (2025)
Clean shipping and ports	Cleaning up shipping and ports with lower-carbon fuels and better environmental controls		Decarbonisation rules plus green-corridor demand makes zero-emission shipping the maritime default	ZEMBA (2026)



Build a Waste-Free World



This Earthshot aims to build a world where nothing goes to waste – where the leftovers of one process become the raw materials of the next. Currently around 40% of global waste ends in open dumps, while food waste reaches over a billion tonnes each year. The tipping point here is found in regulatory and finance mechanisms focused on both the **upstream design and downstream recovery of materials**, so that most of the waste is used again and again.

For instance, **policy, procurement and finance mechanisms** are the government rules, public spending power and funding decisions that underpin every other circular-economy tipping point. Our 2022 Finalist, **The City of Amsterdam Circular Economy**, shows how these principles work in practice,

as it redesigns its urban systems in an effort to waste nothing and recycle everything by 2050. Our 2026 Finalist, **South Korea's Zero Food Waste Network**, has taken the country from recycling just 2% of its food waste in 1995 to 95% in 2026, through pay-by-weight collection and smart bins, saving an estimated \$3 billion.





Another area with big tipping potential is **circular construction materials and the climate-adapted built environment**. Construction and demolition is the largest single waste stream globally, making up around 30% of total solid waste. Reusing materials and designing buildings to last and adapt would have a huge impact in cutting the waste and embodied carbon of this sector. Our 2025 Finalist, **Quay Quarter Tower** in Australia, is the world's first fully upcycled skyscraper and is showing how buildings can be retrofitted and reused, creating a new model for circular construction.

Reliable public waste collection is the foundation for all material recovery, yet around two billion people globally lack access to it. **Transforming municipal waste infrastructure** could phase out open dumping and open burning – where 40% of global waste currently ends up. Our 2026 Finalist, **Mother Earth Foundation** is building community-run recycling centres in Philippine cities and island communities, diverting household waste from landfills, waterways and the ocean.

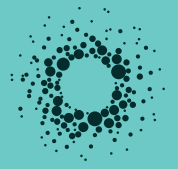




Solution area	Description	Phase	How it could tip	Finalists working in this area
Policy, procurement and finance mechanisms	The government rules, spending power and funding decisions that enable every other lever		A binding global treaty, plus public-procurement demand, creates de-facto international standards	The City of Amsterdam (2022) South Korea's Zero Food Waste Network (2026)
Extended Producer Responsibility (EPR) and eco-modulated fees	Making producers pay for a product's end-of-life, so recyclability gets designed in from the start		As eco-modulated fees reprice products, design-for-circularity becomes the profit-maximising choice and spreads	
Circular construction materials and climate-adapted built environment	Cutting construction's waste and hidden carbon cost by reusing materials and designing buildings to last		When recycled-content and reuse standards plus embodied-carbon pricing take hold, circular construction undercuts virgin-material building	WOTA (2023) Quay Quarter Tower (2025)
Municipal waste infrastructure transformation	Building reliable waste collection and sorting for the two billion people who currently lack it		Reliable collection builds the fee revenue that funds better service — a virtuous loop that makes formal waste systems self-sustaining	Sanergy (2021) Mother Earth Foundation (2026)
Circular packaging materials and design	Redesigning packaging with recycled content and simpler materials so it can be recovered		Design-for-recyclability and recycled content mandates pull material markets until circular packaging becomes the default format	Notpla (2022)
Reuse, refill and deposit return systems (DRS)	Keeping packaging in circulation through reuse, refill and deposit schemes that reward returning containers		Deposit systems flip collection economics quickly, and once infrastructure is in place high return rates become the norm	
Organic waste prevention, composting and anaerobic digestion	Preventing food waste and turning what's left into compost or clean gas instead of landfill methane		Methane-linked climate finance makes diversion pay, and separate organic collection becomes standard municipal practice	The City of Milan (2021) Sanergy (2021) S4S (2023) Ferment'Up (2024) Keep it Cool (2024) Mother Earth Foundation (2026) South Korea's Zero Food Waste Network (2026)
E-waste collection, circular electronics and repairability	Collecting the world's fastest-growing waste stream and keeping electronics in use through better repair		Once repair-network density crosses a threshold and right-to-repair rules bite, repair and reuse outcompete replacement	ATRenew (2025)
Industrial symbiosis and eco-industrial parks	Linking nearby factories so one company's waste becomes another's raw material		When a few firms' waste-to-input exchanges prove profitable, other companies copy and industries shift	
Toxins: microplastics, microfibres, PFAS and pellet loss prevention	Stopping persistent pollutants like PFAS and microplastics at source, as they can't be cleaned up later		A sweeping PFAS/microplastic restriction sets a global precedent that designs persistent pollutants out of products	Colorifix (2023) PFAS-Free France (2026)
Textile and fashion circularity	Keeping clothes and textiles in use longer through durable design, reuse and resale; recovering fibres at end of life		As textile EPR funds separate collection and guarantees feedstock, reuse becomes mainstream and fibre-to-fibre recycling scales until recycled fibre competes with virgin	Fleather (2022) Circ (2023) Natural Fiber Welding (2024) Lagos Fashion Week (2025)

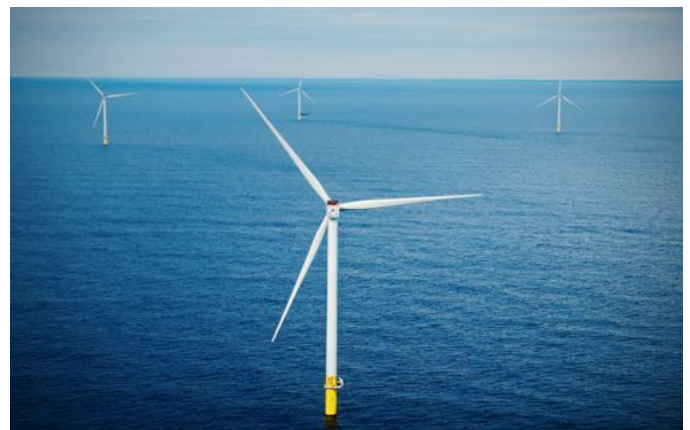
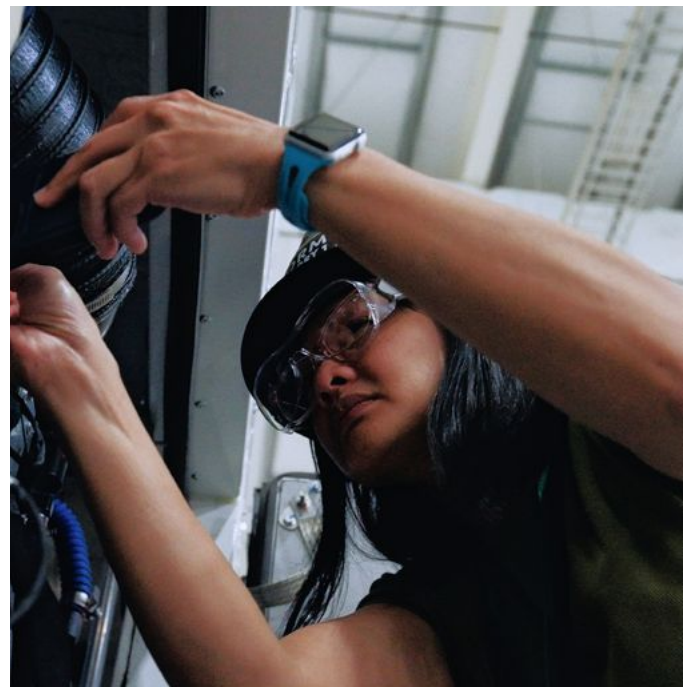


Fix Our Climate



This Earthshot aims to fix the world's climate by cutting carbon out of the global economy, **halving emissions this decade and reaching net zero**, while building resilience for the communities already living with its consequences. This area is where the tipping point science is most developed: solar PV has crossed a global tipping point, electric vehicles are crossing in leading markets, and several other transitions are fast approaching their thresholds.

Clean electricity and flexible power systems, achieved through grid expansion and closing the Global South clean energy investment gap, are now needed for renewables to reach global scale. Our Finalists are addressing both of these challenges. **Reeddi** and **SOLshare** (both 2021 Finalists) are expanding access to clean, decentralised energy in underserved markets. **Ørsted** (2026) transformed from one of Europe's most coal-intensive utilities, into the operator of the world's largest fleet of offshore wind turbines. Meanwhile, **Form Energy** (2025) is building breakthrough, long-duration energy storage systems, capable of storing 100 hours of clean energy at a time.





Another vital area here comes under **anticipatory action, adaptation finance and climate-resilient infrastructure**. Climate adaptation funds are normally only mobilised after a flood, drought or storm has already done its damage. Anticipatory action is proactive, with pre-agreed funds released automatically when a credible forecast crosses an agreed trigger, allowing authorities and agencies to act in a window before impact. This has been shown to reduce mortality and damage by 30–60% compared with post-event responses in operational programmes. Related to this, climate-resilient infrastructure standards outline the structural requirements needed to withstand extreme weather events.

In the last year, we have seen a growing number of solutions in this area, as our 2025 Finalists attest. **Friendship** protects vulnerable communities in Bangladesh, combining vital services like healthcare and education with climate resilience projects that save lives, restore ecosystems, and create opportunities, while **Barbados**, under the leadership of Prime Minister Mia Amor Mottley, is reshaping global climate finance systems, making them fairer and more effective for climate vulnerable nations.

Rising global temperatures is creating a cooling–emissions doom loop – hotter conditions drive cooling demand, which drives electricity demand, which drives emissions, thus driving further warming. **Sustainable cooling and the heat mitigation nexus** is a key area for tipping and our 2026 Finalist, **Mahila Housing Trust**, is at the forefront, giving communities in India practical tools to survive increasing heat levels, including cool roofs, and climate risk insurance covering incomes for 48,000 women across seven cities.





Solution area	Description	Phase	How it could tip	Finalists working in this area
Clean electricity and flexible power systems	Scaling the solar, wind and smarter grids, already the cheapest new electricity in most markets		Cheap renewables plus flexibility (storage, grids, demand response) make clean power self-propelling	Reeddi (2021) SOLshare (2021) Enapter (2021) Advanced Thermovoltaic Systems (2024) Form Energy (2025) Ørsted (2026)
Electrified mobility and Avoid-Shift Improve transport	Switching cars and buses to electric power while making it easier to avoid unnecessary journeys		Battery cost curves and modal shift carry EVs to majority sales, and charging/ demand feedbacks lock in the transition	
Sustainable cooling and the heat mitigation nexus	Meeting the world's growing need to stay cool without driving up emissions		Efficient cooling plus passive heat mitigation breaks the cooling emissions doom loop before demand triples	Mahila Housing Trust (2026)
Methane abatement across fossil fuels, agriculture and waste	Cutting methane from oil, gas, farming and waste — the fastest lever to slow near-term warming	 → 	Satellite detection makes leaks visible and cheap to fix, and benefits of near term reductions in global warming make abatement the fastest self-justifying action	Sea Forest (2023)
Land-based mitigation: halt deforestation, restore ecosystems	Halting deforestation and restoring ecosystems and soils to lock in more carbon		As restored ecosystems become self-sustaining and deforestation regulation bites, the land sink strengthens rather than erodes	Boomitra (2023)
Heat pumps, deep retrofits and building sufficiency	Switching building heat to electric heat pumps and cutting how much energy buildings need	 → 	Heat-pump cost parity plus tightening retrofit standards make efficient electrified buildings the default choice	
Industrial transformation: net zero steel, cement and chemicals	Making heavy industry close to carbon-free through cleaner production and less material use		Green-procurement coalitions create guaranteed lead demand, driving green premiums toward zero and tipping heavy industry	Enapter (2021) LanzaTech (2022) Low Carbon Materials (2022) Advanced Thermovoltaic Systems (2024) Equatic (2024)
Systemic demand side tipping: diets, sufficiency and circular materials	Shifts in what people eat, buy and use, which help every other climate solution take hold faster		Once low-carbon options are affordable, accessible and attractive, norm-shift dynamics in food, fashion and materials become self-reinforcing	
Anticipatory action, adaptation finance and climate-resilient infrastructure	Replacing reactive disaster spending with funding agreed in advance and released before impact hits		As early action visibly cuts losses and lowers financing costs, adaptation becomes self-propelling	Build Up Nepal (2024) Barbados (2025) Friendship (2025) Mahila Housing Trust (2026) Pula (2026)
Durable carbon removal with stringent integrity rules	Scaling permanent carbon removal like direct air capture, under strict quality rules, for emissions nothing else can cut		Integrity standards plus falling costs and compliance demand build a durable removal market able to scale to net-zero requirements	44.01 (2022) Equatic (2024)

Conclusion

Applying the science of positive tipping points to the five Earthshots has given us, for the first time, a clear view of where actions have the best chance of tipping us towards planetary system repair.

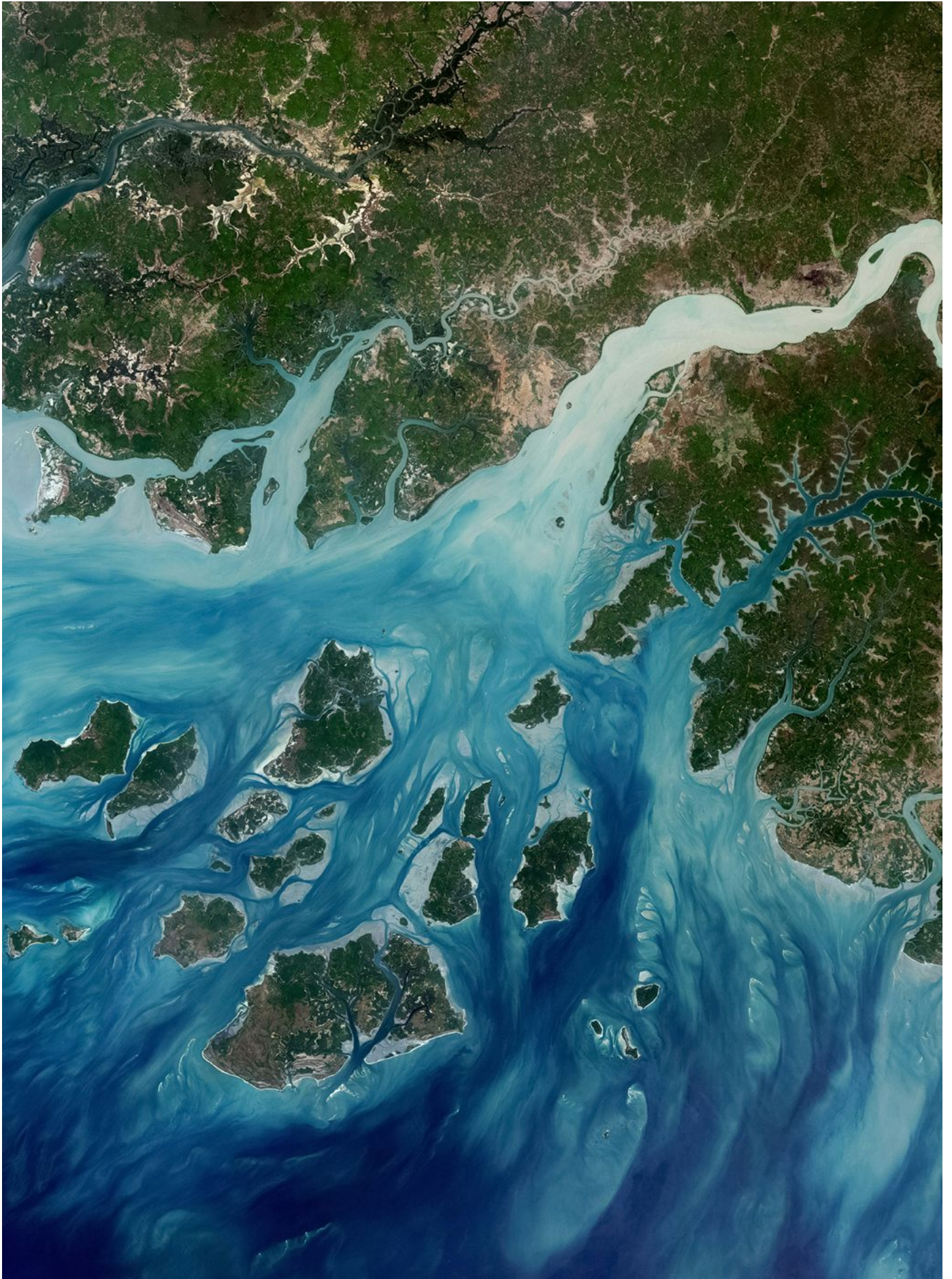
It serves as a blueprint for selecting, supporting, and connecting Earthshot Finalists to maximise their tipping potential and accelerate their positive impact. The analysis highlights opportunities to discover new Earthshot Finalists for other positive tipping points. As we approach the end of this decisive decade, this has never been more important.

The report reminds us that all five Earthshots are deeply interconnected, co-existing within a single system and subject to shared infrastructure, governance mechanisms, finance instruments and risks. This means that certain interventions, such as the clean electricity cascade, could accelerate positive tipping points across all of our Earthshots; while barriers, such as the Global South

investment gap, could stall progress in the regions that need it most. Discovering, scaling and championing solutions that address these different challenges will give us the best chance of triggering multiple positive tipping points at once.

Since The Earthshot Prize was founded by Prince William in 2020, we have been driven by the belief that urgency + optimism = action. Over halfway through this decade of action, the concept of positive tipping points gives this belief a systemic foundation and a powerful reason for optimism. We must now come together to tip change over the threshold; there has never been a more unifying mission in history.

For more information about this report and the data within it please refer to the [full report](#).





Yellowstone to Yukon (2026)



AirQo (2026)



Costa Rica (2021)



Indigenous Desert Alliance (2026)



Coral Vita (2021)



Ørsted (2026)



Advanced Thermovoltaic Systems (2024)



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