

An aerial photograph of a tropical coastline. The left side of the image shows clear, turquoise water with visible coral reefs. The right side shows a dense, lush green forest bordering a narrow sandy beach. The overall scene is vibrant and natural.

Allianz 

Nature on the  
brink: **Why a  
thriving planet  
matters for us all**

# Foreword

Nature loss is accelerating around the world – wildlife populations are declining rapidly, unsustainable land use is harming ecosystems, and our limited natural resources are being overexploited. When considered within the context of a warming climate, which exacerbates extreme weather and habitat disruption, the consequences are dire.

Collapsing biodiversity and degraded ecosystems are not simply environmental issues. They are immediate threats to human wellbeing, global resilience, and economic stability. To name one example, the decline in bee populations requires manual pollination of crops, which increases operational costs and limits the availability of agricultural products. These effects spill over into balance sheets, insurance models, and policy debates.

At Allianz, we understand that the health of our planet is inseparable from the health of our economy and society. Thriving ecosystems and a stable climate are the foundations of functioning markets and long-term financial stability. Our sustainability strategy reflects this reality. It makes nature one of the core factors in our investment decisions, long-term planning, and risk assessments.

In this publication, *Nature on the Brink: Why a Thriving Planet Matters for Us All*, we highlight the urgency of the situation: Six of nine planetary boundaries have already been breached. This is more than a scientific red flag – it is a decisive moment for the private and public sectors to act.

Environmental risks inform how Allianz assesses long-term value and where we allocate capital. That means challenging assumptions, questioning unsustainable practices, and engaging directly with the companies we invest in. It also means supporting efforts that move beyond mitigation toward restoration.

Our involvement in initiatives like Nature Action 100 and the Investor Initiative on Hazardous Chemicals is part of this increased focus on nature. These are not PR exercises; rather, they are changing how the financial system responds to nature loss. Likewise, our Enaleia, Plastic Fischer, and Sea Shepherd partnerships tackle real problems – degraded coastlines, plastic waste, overfishing – on the frontlines of marine protection.

Meeting the scale of today's environmental crises will require not just better practices, but a fundamental transformation of our economic systems – toward models that recognize ecological limits and create long-term value for people and planet alike. There's no precedent for rebuilding planetary health. But we know that the degradation of nature is frequently irreversible, with restoration becoming impossible or prohibitively expensive once critical thresholds are crossed. This underscores the urgent need to stop nature loss and safeguard the vital systems that sustain human well-being and planetary health. The question is whether we act to protect them.

By



**Barbara Karuth-Zelle**

Member of the Board of  
Management of Allianz SE



**Günther Thallinger**

Member of the Board of  
Management of Allianz SE

# 01 Introduction

Nature<sup>1</sup> is not a luxury – it’s the foundation of life. Its decline isn’t just an environmental problem; it’s a human one. The food we eat, the air we breathe, the climate we rely on, and the economies we build all depend on thriving ecosystems and their services. Currently, six of the nine planetary boundaries<sup>2</sup> are breached. Each is closely tied to the health of nature and defining the “safe operating space” for humanity. Biosphere integrity, land system change, and freshwater use are three of these breached

boundaries, underscoring the urgent need for efforts to restore balance in nature. Allianz is actively addressing nature loss as a key component of its sustainability strategy. This involves conducting thorough due diligence and engaging with investee companies on nature-related issues. Additionally, Allianz supports conservation measures to further bolster its commitment to nature conservation and restoration.



## 02 Nature is disappearing

Nature is vanishing before our eyes. In just the past 50 years, monitored vertebrate populations around the world have declined by an average of 73%. Freshwater species have fared even worse, plummeting by 85%.<sup>3</sup> On land and in the ocean, the story is much the same – ecosystems under

pressure and biodiversity in freefall. This is more than an environmental crisis. It's an economic and social emergency. The systems that sustain life on Earth – including ours – are unravelling. And the consequences of inaction will touch every part of human life.

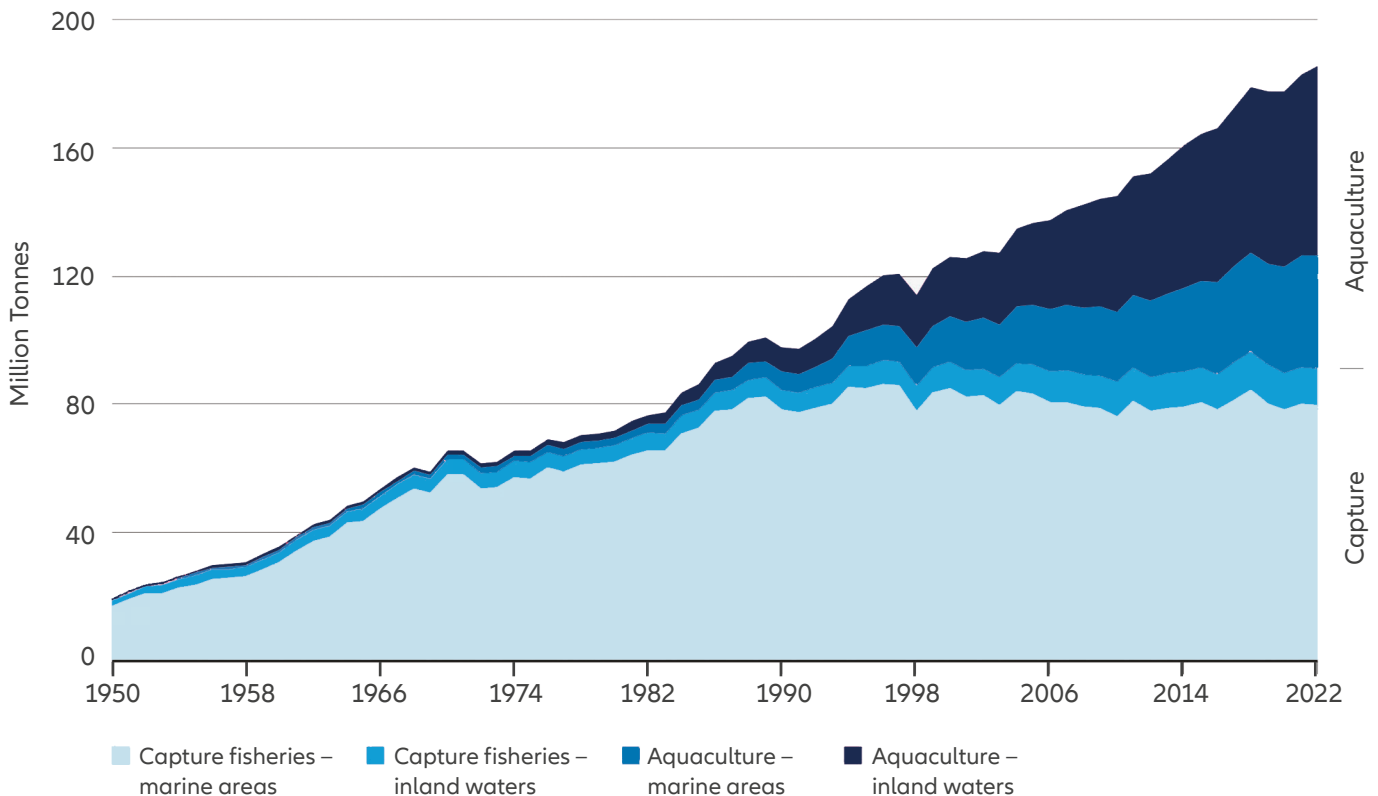


# 03 The drivers of biodiversity loss

A big part of the problem is changes to land use, largely driven by the expansion of agriculture. In 1900, croplands covered 0.9Bn hectares. Today, they cover 1.6Bn hectares, an increase equivalent to the size of Australia.<sup>4</sup> When you add grazing land, the footprint grows even larger, displacing forests, wetlands, and other critical ecosystems.<sup>5</sup> Deforestation is at particularly alarming levels. Tropical primary forest loss increased by an alarming 80% from 2023 to 2024.<sup>6</sup> These forests aren't just home to wildlife. They play an essential role in climate regulation, water cycling, and carbon storage – all on a global scale. When they disappear, the irreplaceable services they provide vanish, too.

Overexploitation of natural resources is another key driver of biodiversity loss. The ocean, in particular, is an example of this immense strain. Nearly 5Mn fishing vessels operate globally, with an estimated 75% of industrial vessels untracked. These vessels haul in 185Mn tons of aquatic life annually.<sup>7</sup> More than one third of global fish stocks are already overfished, and populations of large predators like tuna and sharks have fallen by as much as 90%.<sup>8</sup> Bycatch – the unintended capture of non-target species – accounts for up to 40% of the total catch.<sup>9</sup> While aquaculture helps meet growing seafood demand, it can add further pressure by relying on wild fish for feed, and polluting surrounding ecosystems.

**Figure 1:** World Fisheries and Aquaculture Production of Aquatic animals



FAO. 2024. The State of World Fisheries and Aquaculture 2024 – Blue Transformation in action. Rome.

Invasive species are also a major threat, often spreading unintentionally via international shipping and air transport. Their impact is amplified by increased global trade and travel. These invasive species can outcompete native species, disrupt food webs, and degrade ecosystems. Species like the North American raccoon, though often regarded with affection, are invasive. They cause significant damage by drastically hunting native species in environments beyond their native range. Invasive species are responsible for 60% of global extinctions and impose an economic cost exceeding \$423Bn every year. They are reshaping landscapes and seascapes, often in irreversible ways.<sup>10</sup>

Climate change intensifies all of these pressures – and is itself reinforced by loss of ecosystems, which often include important carbon sinks. On land, warming temperatures lead to loss of habitat, disruption of ecological processes and food chains, as well as conflict between humans and wildlife. In the ocean, rising CO<sub>2</sub> levels lead to acidification and warming, massive fish die-offs, bleaching of coral

reefs, and weakened marine ecosystems. These changes are happening faster than the rate at which most species and systems can adapt. The combined impact is accelerating nature's decline and pushing ecosystems closer to collapse.

Pollution adds another layer of stress. Perfluoroalkyl and polyfluoroalkyl substances (PFAS), so-called "forever chemicals," can last thousands of years. Substances like broad-spectrum herbicides, hormones, or antibiotics are also extremely harmful to terrestrial and marine ecosystems. Plastics, with an annual influx of at least 14Mn tons annually,<sup>11</sup> now makes up the vast majority of marine litter. They choke coastlines and float in gyres across the open sea. Microplastics are found everywhere – from the deepest ocean trenches to the human bloodstream. If current trends continue, the volume of plastic entering the ocean will triple by 2040. Larger debris entangles marine mammals and birds, while smaller particles accumulate in the food chain, affecting wildlife and, potentially, human health.

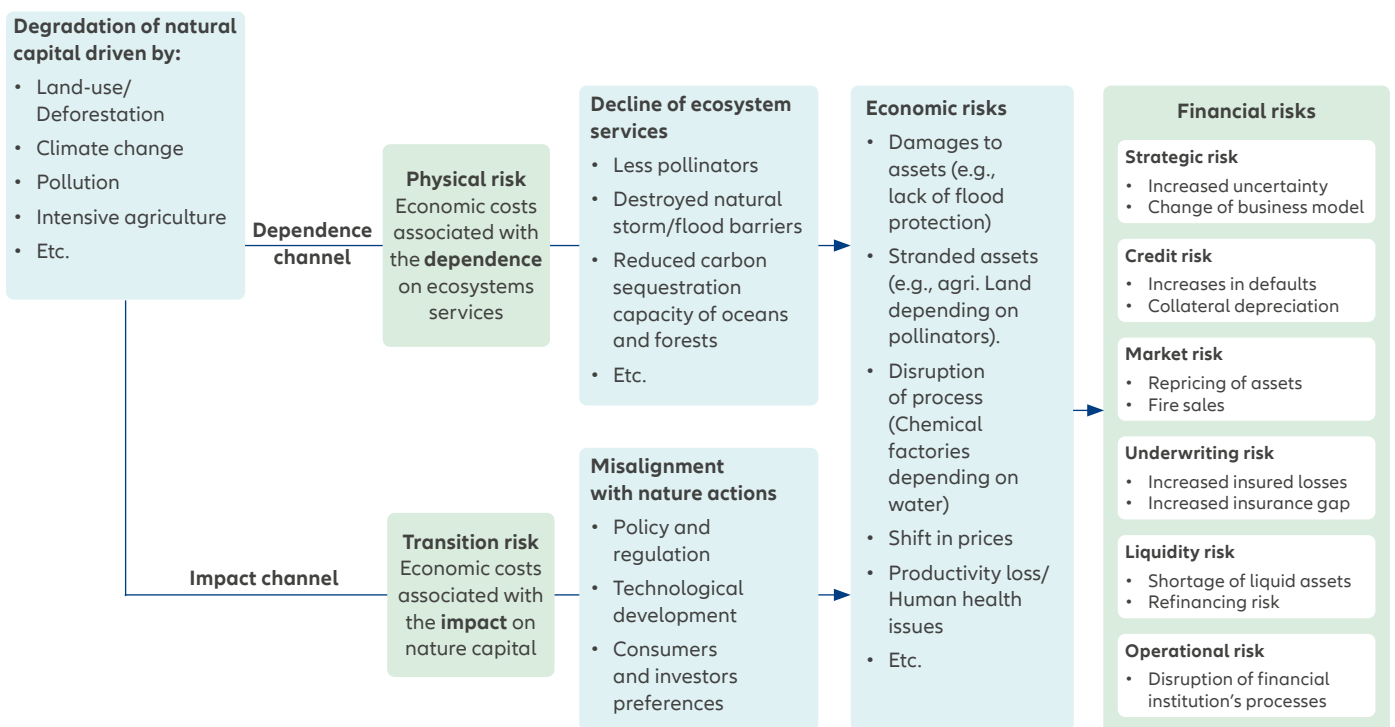


# 04 The effects of biodiversity loss on ecosystem services and the economy

It's obvious to think of nature as something beautiful or recreational, but its true value goes far deeper. Nature underpins every part of our lives. It provides food, water, clean air, raw materials, and medicine. It stabilizes the climate, supports agriculture through pollination, and helps to protect communities from floods and droughts. These benefits are known as ecosystem services, and they fall into four broad categories: provisioning

(goods we take out of nature directly, such as water and timber), regulating (such as climate and pollination), supporting (like soil formation and nutrient cycling), and cultural (spiritual, mental, and recreational). These services are worth more than twice the world's annual GDP, yet most remain invisible in economic decisions – until they're faltering or lost.

**Figure 2:** Natural capital loss leads to a decline in ecosystem services, which in turn cause economic losses and risk



Sources: NGFS, Allianz Research

When nature collapses, the consequences are immediate and far-reaching. Consider the Amazon rainforest, which acts as a giant water pump. It pulls moisture from the Atlantic Ocean and distributes it as rainfall across the continent. This rainfall feeds rivers, supports agriculture, and powers hydroelectric plants. But as deforestation continues, the system weakens. Fewer trees mean less moisture and less rain. Scientists warn that if 20-25% of the Amazon rainforest were destroyed, the Amazon could reach a tipping point, transforming from rainforest to dry savanna. We have already reached a figure of 17%. If the Amazon collapses, restoring it would be virtually impossible, even with large-scale efforts. The impacts wouldn't be local – they'd ripple across the Americas, threatening agriculture, water supplies, and regional weather systems.

Forests also play a vital role in carbon storage, absorbing more than 30% of our carbon emissions.<sup>12</sup> When they burn, they release massive amounts of CO<sub>2</sub>. In 2023, wildfires in Canada alone released 480Mn tons of CO<sub>2</sub> – nearly 70% of the country's annual emissions that year.<sup>13</sup> The loss of tropical forests in 2024 alone caused the emission of 3.1 Gt of greenhouse gases into the atmosphere. The ocean, too, is a powerful ally against climate change. It absorbs 25-30% of our carbon emissions and holds more than 50 times the amount of carbon found in the atmosphere. It also stores 90% of excess heat from greenhouse gases. But as oceans are overfished, as they warm and acidify, their ability to store carbon weakens, and marine life suffers in the process. Losing these carbon sinks would not just accelerate global warming – it would eliminate our best buffers against it.<sup>14</sup>

Nature also delivers more specific, measurable economic benefits. Pollinators, including bees and butterflies, are essential for more than 100 major crops. Their global contribution is valued at over \$800Bn.<sup>15</sup> Without them, food security would plummet and economies would suffer. The U.S. alone could face a \$28Bn hit to GDP if pollinator services were to collapse.<sup>16</sup> Wetlands are another high-value ecosystem, not only for their high carbon sequestration potential. In Europe, they provide over \$71,000 worth of services per hectare each year – from tourism to water purification and flood control. Globally, the ocean economy would rank as the seventh largest economy if it were a country.<sup>17</sup>

The degradation of ecosystem services and loss of nature have profound consequences on society, affecting food security and livelihoods. With diminishing natural resources, countless farmers and fishermen face challenges in sustaining their practices, leading to reduced agricultural productivity and fish stocks. This threatens food availability and increases vulnerability to food shortages, particularly in communities that are heavily reliant on local ecosystems. As forests are burned to make space for new agricultural land, air quality deteriorates, releasing harmful pollutants that contribute to respiratory and cardiovascular diseases, impacting public health. Ultimately, the erosion of natural systems compromises the health, economic stability, and resilience of societies around the world.

To capture nature's economic role more clearly, experts have begun using a measure called Gross Ecosystem Product (GEP) – the ecological equivalent of GDP. GEP tallies the full value of nature's contributions to our economy, including services that markets often overlook. The estimated global GEP stands at over \$182Tn, underscoring how much we rely on ecosystems even without realizing it.<sup>18</sup>



# 05 More action needed to halt biodiversity loss

So, what needs to change? First, we need stronger, faster policy action. The Kunming-Montreal Global Biodiversity Framework, agreed in late 2022, sets out 23 targets for 2030. These include protecting 30% of land and sea, restoring 30% of degraded areas, and drastically cutting pollution. Similarly, the UN High Seas Treaty – adopted in 2023 – aims to protect biodiversity in the two thirds of the ocean beyond national jurisdiction. Today, only 1% of those waters are protected. As of now, 50 countries have ratified the treaty, with only 10 additional ratifications required for it to enter into force.<sup>19</sup> These policies offer real hope, but only if implemented boldly and enforced effectively.

Second, the private sector must step up. Voluntary action from companies to assess, address, and disclose their nature-related impacts, risks, and dependencies – especially those in sectors like agriculture, food, finance, and mining – can accelerate progress. Most projects and sectors that contribute significantly to the destruction of biodiversity require external funding. This makes the financial sector a key player in the potential protection of the biosphere. Actions in the food and agriculture sector

include deforestation-free and conversion-free supply chains requiring strong tracking of all suppliers, and usage of digital tools such as satellite imaging to establish transparency and credibility. But isolated efforts won't be enough. The transition must be systemic. That means investing in business models, production, and consumption practices, and in supply chains that support, rather than deplete, biodiversity. It means rethinking risk to include nature loss alongside climate and financial instability.

Finally, we need to close the funding gap. Protecting nature will require about \$1.15Tn in investment each year by 2030. Today, the international community spends just \$208Bn – a shortfall of \$942Bn annually. This may sound steep, but it's less than 1% of global GDP. Compared to the cost of inaction – from ecosystem collapse to food and water crises – it's a bargain. More funding is essential for conservation, restoration, and the communities that steward nature. Without it, even the best policies and corporate strategies will fall short.<sup>20</sup>



## 06 Allianz actions

At Allianz, we apply a holistic sustainability approach in our Property-Casualty underwriting and proprietary investments portfolios. This approach aims to manage potential adverse impacts of our business footprint and capture business opportunities. This includes integrating due diligence criteria on biodiversity, addressing aspects such as deforestation, pollution, and water, marine, and other resources in our decision-making.

Assessing the biodiversity impacts, risks, and dependencies of our proprietary investment and underwriting portfolio is an emerging topic for us and the financial industry. Considering constraints related to the measurement of – and accessibility to – comparable disclosed data at scale, standardized methodologies, and metrics, we are also exploring how we can conduct such assessments. Our recently released [Allianz Biodiversity Case-study](#) offers valuable insights into how we are piloting these initiatives within our proprietary investment portfolio.

As an institutional investor, one of the most effective actions we can take to address our impacts, risks, and dependencies associated with nature and biodiversity loss is through engagements with our investee companies. Besides bilateral dialog with investee companies, Allianz Investment Management has joined several important multilateral engagement initiatives: [Nature Action 100](#), [PRI Spring, Investor Initiative on Hazardous Chemicals \(IIHC\)](#), and [Mining 2030](#). Through these investor-led initiatives we aim to address biodiversity loss, forest and land degradation, hazardous chemicals, and responsible business practices.

In addition, Allianz is actively supporting ocean conservation measures to reduce plastic pollution, halt overfishing, and decrease illegal, unreported, and unregulated fishing. One example of these partnerships is [Sea Shepherd](#), an international non-profit anti-poaching organization dedicated to marine conservation. Allianz partnered with Sea Shepherd in 2020 and, since then, has been providing funding for the newly acquired ship “Sea Eagle” and its crew. They tackle plastic pollution by removing abandoned fishing gear in the Mediterranean Sea. Since the launch of the partnership, 396 km of nylon fishing lines, 10 km of ghost nets, 15 tons of driftnets, and 77 tons of illegal fishing gear have been collected. Other partnerships to tackle plastic waste are [Plastic Fischer](#) and [Enaleia](#). While these initiatives are valuable in reducing plastic waste, it is even more important to explore alternatives to plastic and ensure it does not find its way into our oceans in the first place.

In conclusion, Allianz is contributing to stopping nature loss. Biodiversity loss is a global emergency, but it’s also a solvable one. We have the knowledge and the tools to turn things around. What we now need is the will – at every level of society – to act, before we pass the point of no return.



# References

1. When we refer to “nature” in this document we are talking about biodiversity and ecosystem services
2. [Planetary boundaries - Stockholm Resilience Centre](#)
3. [WWF](#)
4. [World in data](#)
5. [World in data](#)
6. [WRI](#)
7. [Nature](#)
8. [FAO](#)
9. [WWF](#)
10. [UNEP/IPBES](#)
11. [IUCN](#)
12. [IPCC](#)
13. [Copernicus, Government of Canada](#)
14. [Allianz Research](#)
15. [Nature](#)
16. [Allianz Research](#)
17. [Allianz Research](#)
18. [Biodiversity Finance Factbook](#)
19. [UNEP, UN](#)
20. [BloombergNEF](#)

## **Allianz Group Economic Research & Global Sustainability**

[https://www.allianz.com/en/economic\\_research](https://www.allianz.com/en/economic_research)

<http://www.allianz-trade.com/economic-research>

<https://www.allianz.com/en/sustainability/>

Königinstraße 28 | 80802 Munich | Germany

[allianz.research@allianz.com](mailto:allianz.research@allianz.com)

[corporate.responsibility@allianz.com](mailto:corporate.responsibility@allianz.com)

X: @allianz

LinkedIn: allianz

**Publication Date: July 2025**

### **Cautionary note regarding forward-looking statements**

This document includes forward-looking statements, such as prospects or expectations, that are based on management's current views and assumptions and subject to known and unknown risks and uncertainties. Actual results, performance figures, or events may differ significantly from those expressed or implied in such forward-looking statements.

Deviations may arise due to changes in factors including, but not limited to, the following: (i) the general economic and competitive situation in the Allianz's core business and core markets, (ii) the performance of financial markets (in particular market volatility, liquidity, and credit events), (iii) adverse publicity, regulatory actions or litigation with respect to the Allianz Group, other well-known companies and the financial services industry generally, (iv) the frequency and severity of insured loss events, including those resulting from natural catastrophes, and the development of loss expenses, (v) mortality and morbidity levels and trends, (vi) persistency levels, (vii) the extent of credit defaults, (viii) interest rate levels, (ix) currency exchange rates, most notably the EUR/USD exchange rate, (x) changes in laws and regulations, including tax regulations, (xi) the impact of acquisitions including and related integration issues and reorganization measures, and (xii) the general competitive conditions that, in each individual case, apply at a local, regional, national, and/or global level. Many of these changes can be exacerbated by terrorist activities.

### **No duty to update**

Allianz assumes no obligation to update any information or forward-looking statement contained herein, save for any information we are required to disclose by law.