

SUSTAINABILITY

BULLETIN



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World News

One Person Dies Every Minute Due to Rising Temperatures

The Lancet Countdown 2025 report reveals that human-induced global warming has now directly turned into a public health crisis. According to the report, extreme heat causes one person to lose their life every minute worldwide.



Analyses show that rising temperatures lead to approximately 500,000 deaths annually on a global scale, corresponding to 0.91% of total deaths. Researchers emphasize that increasing green spaces in cities is an effective solution. It is calculated that by increasing vegetation cover by just 20%, temperatures could be reduced and more than 1 million premature deaths could be prevented.

The Solar-Powered Pump Revolution Could Provide Water to Millions of People

Solar-powered water pumps, which could enable approximately 400 million people in Africa to meet their water needs from groundwater sources, are creating a significant transformation in access to clean water. This zero-emission technology eliminates the need for fossil fuels and facilitates access to water, especially in rural and off-grid areas.

However, experts emphasize that for this transformation to deliver real social benefits, the pumps must be distributed fairly to disadvantaged communities and small-scale farmers. At the same time, it is critically important that effective management and regulatory policies are urgently implemented to prevent the overexploitation of groundwater resources.





The “Distressing” State of the World’s Forests

A striking report released to the public by Climate Focus emphasizes that the health of the world’s forests is critically poor and that this situation constitutes one of the greatest threats to humanity by accelerating biodiversity loss and the climate crisis. The report demonstrates that, despite their sustainability commitments, globally operating financial institutions continue to provide funding to projects that lead to land clearing and deforestation. This exposes a deep ethical and operational contradiction between institutional declarations and actual practices. Climate Focus issues an urgent call to action for the protection of the biosphere, urging the global financial sector to immediately halt these destructive practices and to radically restructure sustainability commitments by placing the protection of natural ecosystems at their core.



Dark Oxygen Production in the Oceans

A groundbreaking new study published in Nature Geoscience has revealed a previously unknown critical role of the deep oceans within the ecosystem. According to the research, metallic nodules found on the ocean floor produce “dark oxygen” through chemical reactions, quietly contributing to the global life cycle. This vital discovery proves how indispensable the ocean floor is for the biosphere. However, the areas where these nodules are located overlap with regions that are attracting intense interest from mining companies and where deep-sea mining projects are being planned.

Researchers warn that if mining activities take place in these fragile ecosystems, they could irreversibly disrupt marine life and this critical oxygen production mechanism, thereby endangering global environmental balance. This situation further reinforces the urgent need to protect deep-sea environments and to halt mining plans by taking ecological risks into full consideration.

Solar-Powered AI in Space

(Google Project Suncatcher)

Google has turned its attention to space in search of a solution to the massive energy demand of artificial intelligence data centers. A new initiative called Project Suncatcher aims to establish orbital AI data centers on satellites powered by solar energy. The project, whose details were revealed in November, seeks to reduce carbon emissions on Earth by harnessing uninterrupted solar energy 24/7 without atmospheric interference.



Chemical Weapons: A Persistent Threat to Humans and the Environment

Chemical weapons have caused the deaths of tens of thousands of people throughout history and have created long-lasting and irreversible damage to nature in the regions where they were used. Since the First World War, these weapons have polluted soil, water resources, and ecosystems, delaying environmental recovery for many years.



The Chemical Weapons Convention, developed to counter this threat, has prohibited the development, production, and use of chemical weapons since 1997. The Organisation for the Prohibition of Chemical Weapons (OPCW), which oversees the implementation of the Convention, has designated November 30 as the “Day of Remembrance for All Victims of Chemical Warfare,” aiming to commemorate both human losses and environmental destruction.



A Sustainable Delivery Initiative from New York

The New York City government is establishing a Department of Sustainable Delivery (DSD) to make urban deliveries safer, more organized, and more environmentally friendly. Operating under the Department of Transportation, the new unit will both regulate and support deliveries carried out with zero-emission vehicles such as e-bikes and e-scooters.

Among DSD's main objectives are preventing illegal and dangerous vehicle use, ensuring that delivery workers use safe and legally compliant equipment, and making delivery practices more responsible. Within this framework, regulations such as a speed limit of 24 km/h for e-bikes and scooters will be implemented.

With this initiative, the municipality aims to reduce high-emission and risky delivery methods and to accelerate the transition to a cleaner, safer, and more systematic delivery model. The policy is regarded as a noteworthy example for cities in terms of both environmental and social sustainability.



MOSQUITO DETECTED IN ICELAND FOR THE FIRST TIME

A mosquito has been detected in Iceland for the first time. In a country that has so far had no mosquito population due to its cold climate and limited standing water areas, this development is considered one of the concrete impacts of climate change.

In May 2025, Iceland recorded a temperature record of 26.6°C, with some regions experiencing temperatures up to 10 degrees above seasonal averages. Experts warn that Iceland's warming at a rate approximately four times faster than the global average could create conditions that allow mosquitoes to survive and settle in marshes and ponds.



Three mosquito specimens identified in the Kjos glacial valley near Reykjavik were classified by the Icelandic Institute of Natural History as the cold-tolerant species *Culiseta annulata*. While experts note that further observation is needed to determine whether this species will become permanent, they also emphasize that rising temperatures may increase the risk of other mosquito species establishing themselves in the country in the future.

News From Türkiye

A PEAK IN RENEWABLE ENERGY



It has been analyzed that in the first half of 2025, renewable energy sources generated more electricity than coal for the first time in global energy history. This highlights the rapid growth of solar and wind energy. Türkiye has crowned its progress toward energy independence and decarbonization goals with a concrete record. As of the end of September, the country's total installed electricity capacity reached a historic peak of 121,418 MW. The fact that nearly two-thirds of this massive installed capacity (approximately 80,945 MW) comes from domestic renewable energy sources such as wind, solar, hydroelectric, and geothermal power confirms the success of Türkiye's energy strategy.

This strong ratio not only reduces the country's energy supply risks and dependence on foreign sources, but also demonstrates that Türkiye is supporting its carbon emission reduction commitments under the Paris Agreement with tangible and ambitious actions.

8 MILLION LITERS OF SEAWATER PROTECTED IN FOUR YEARS

Within the scope of the Cam Gibi Denizler (Clear Seas) project carried out in collaboration between Yorglass and the Marine Cleanliness Association/TURMEPA, approximately 992,000 liters of liquid waste were collected over the past four years in the bays of Marmaris, Göcek, and Selimiye before reaching the sea. As a result, more than 8 million liters of seawater were kept clean.

During the 2025 season, the DenizTemiz 4 vessel operating in the Selimiye bays collected 225,000 liters of waste from 1,228 boats, making a significant contribution to the protection of the marine ecosystem. In addition to preventing marine pollution, the project also supports the conservation of biodiversity and helps raise public awareness about marine protection.

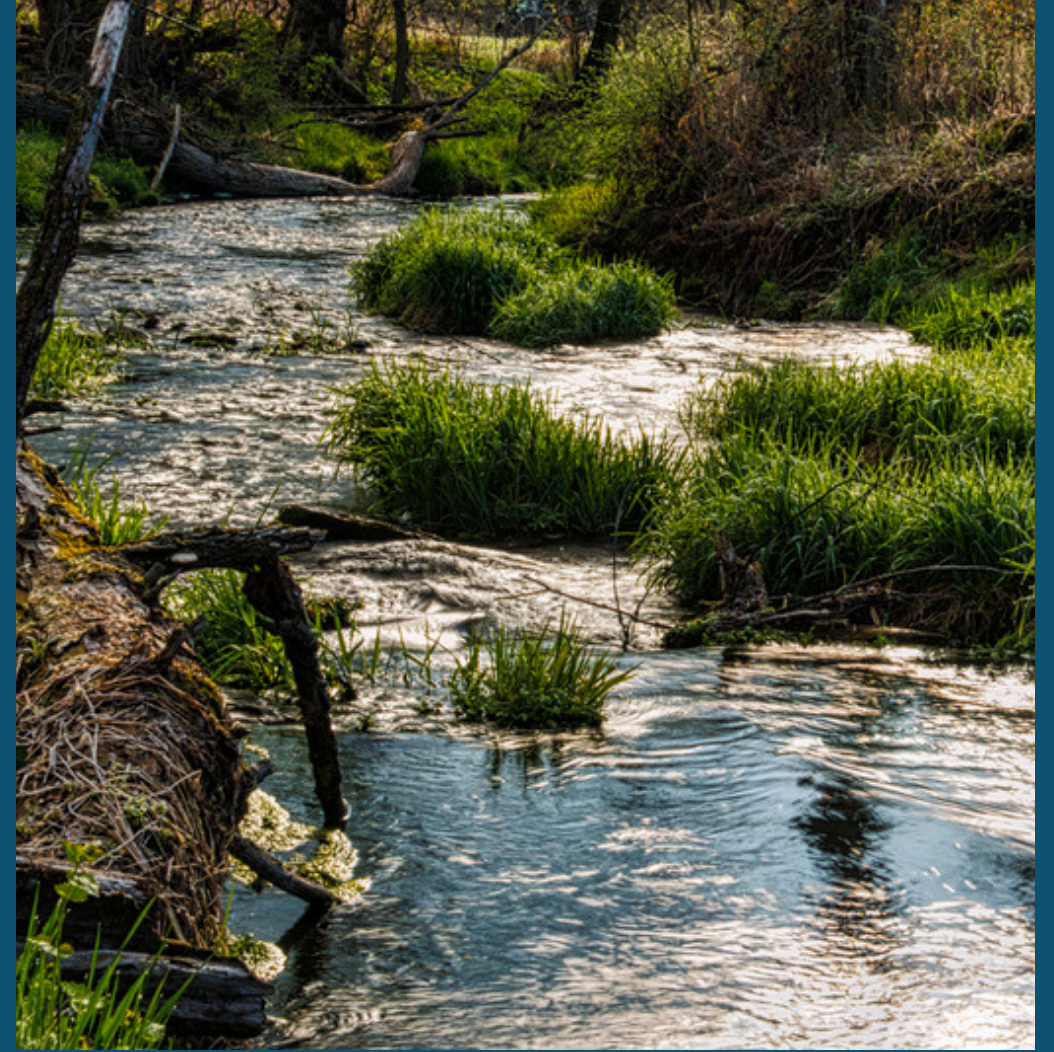


“WATER MOBILIZATION” IN ANTALYA HOTELS

In the Mediterranean basin, where the impacts of the climate crisis are being felt with increasing intensity, a critical “Water Conservation Mobilization” has been launched for tourism in Antalya. Implemented with a sustainable tourism approach, this initiative aims to protect the region’s limited water resources in the face of growing water stress, especially during the summer months.

Within the scope of the project, hotels are encouraged to implement greywater recovery systems, use more efficient irrigation methods in landscaping areas, and expand the adoption of water-saving technologies. At the same time, applications that allow facilities to monitor their water consumption are being promoted, increasing transparency and awareness in resource use.

The core objective of this mobilization is to reduce water consumption per tourist, thereby easing environmental pressure and making Antalya’s tourism activities more resilient to climate change in the long term.



The Lancet Countdown 2025

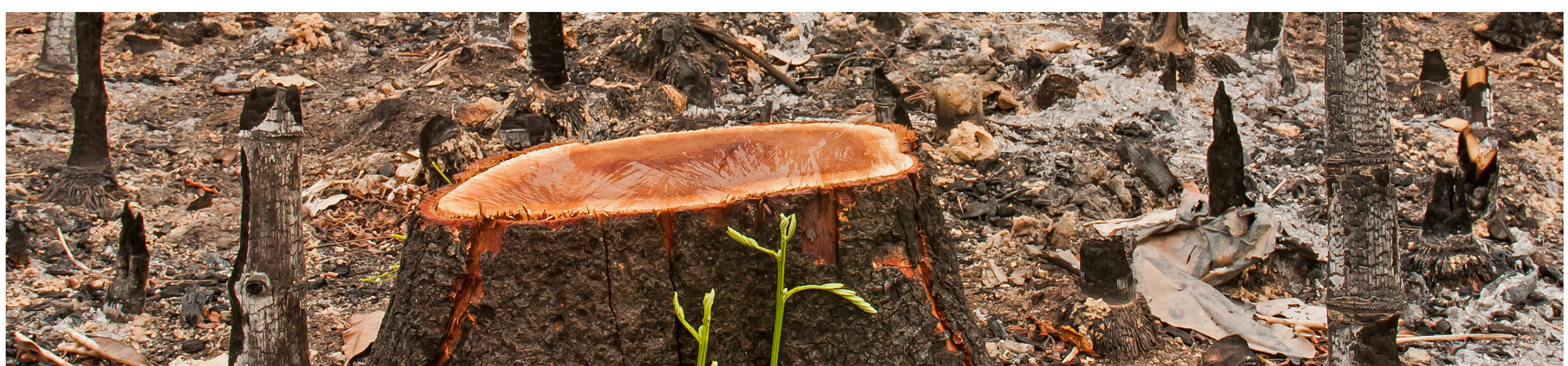
The Lancet Countdown 2025, the most comprehensive report examining the relationship between health and climate change, has been published with critical data for Türkiye. According to the report, people in Türkiye were exposed to an average of 33.6 days of extreme heatwaves in 2024.

More importantly, 642 million working hours were lost due to heat stress, with 53% of these losses occurring in the agricultural sector. This data starkly highlights that sustainability is not only an environmental issue, but also a direct economic and vital one.

Climate Change Action Plan for Forests



The General Directorate of Forestry (OGM) has published the “Climate Change Mitigation, Adaptation Strategy and Action Plan” covering the period 2025–2030. The plan aims to strengthen the carbon sink capacity of forests, increase afforestation and rehabilitation efforts, and create forest ecosystems that are resilient to fires and drought.



FROM COP30 TO COP31

A Period of Confronting Reality and Implementation

COP30, held in Belém, Brazil, was described by many experts as the “COP of Truth,” as it revealed that the gap between scientific evidence and political commitments can no longer be concealed. The summit clearly exposed the limits of global climate governance.

The 1.5°C Target Is Slipping Away

Data presented at COP30 showed that while a 60% reduction in global emissions is required to achieve the 1.5°C target, current commitments stand at only 12%. With existing policies, the world is on a warming trajectory exceeding 2.5°C, and the failure to reach a binding decision on the phase-out of fossil fuels further intensified criticism over the “lack of implementation.”

Finance, Adaptation, and Technology Took Center Stage

Among the summit’s more positive signals was the Baku–Belém Climate Finance Roadmap, which aims to mobilize USD 1.3 trillion annually in climate finance by 2035 and to triple adaptation funding. The FINI initiative seeks to transform countries’ adaptation plans into investment-ready projects.

On the technology front, artificial intelligence, carbon accounting, and disaster risk management solutions stood out. Green hydrogen, sustainable fuels, and carbon capture technologies were highlighted as key components of the Belém Roadmap for hard-to-abate sectors such as cement, steel, and aviation.

Türkiye and COP31

At COP30, Türkiye announced its updated Nationally Determined Contribution (NDC), setting a target to reduce emissions to 643 million tons by 2035, and became a party to several implementation-oriented initiatives. The most critical development, however, was the announcement that Türkiye will host COP31 in Antalya in 2026. This role places Türkiye at the center of the implementation agenda while creating new financing and cooperation opportunities for the business community.

Conclusion

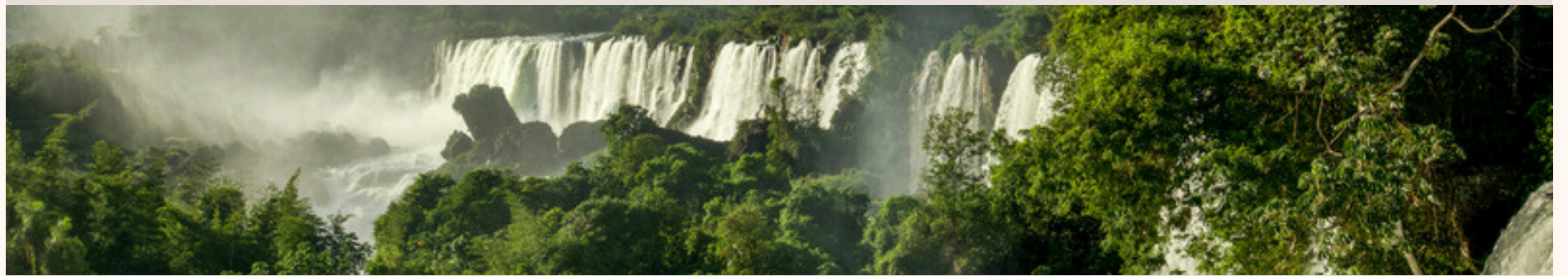
COP30 made it clear that success in climate diplomacy will no longer be measured by rhetoric, but by concrete implementation. As the world rapidly moves away from the 1.5°C target, the fundamental question is this:

How quickly, fairly, and resiliently can we manage this inevitable transformation?



PROTECTING THE PLANET STARTS WITH PROTECTING ANIMALS

Celebrated every year on October 4, World Animal Protection Day marks its 100th anniversary as of 2025. This year's theme, "Protect Animals, Protect the Planet!", once again highlights the inseparable link between animal welfare and the planet's ecological balance. At the heart of global challenges such as the climate crisis, biodiversity loss, and ecosystem collapse lies humanity's relationship with animals.

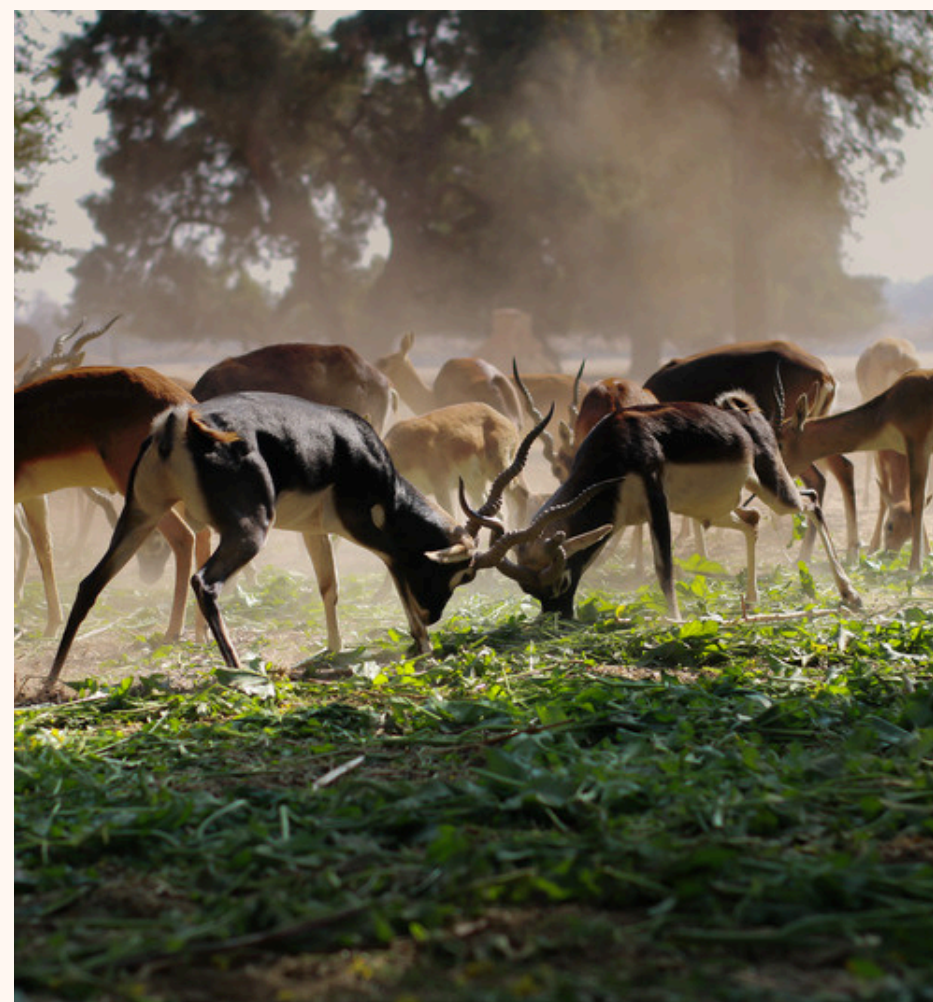


The foundations of this day were laid in 1925 by German writer and animal rights advocate Heinrich Zimmermann. Through his initiative, October 4—the feast day of Saint Francis of Assisi, the patron saint of animals—became a global day of awareness.

BIODIVERSITY LOSS: A SILENT CRISIS

Today, the planet is facing an unprecedented loss of biodiversity. The extinction of species does not merely mean the disappearance of animals; it also triggers cascading effects such as soil degradation, disruption of water cycles, and destabilization of the climate system. The loss of a single species leads to the weakening of entire ecosystems.

Some species are known as "keystone species." Protecting animals such as tigers, wolves, or elephants also ensures the conservation of the forests, wetlands, and grasslands they inhabit. For this reason, protecting animals is not only an ethical responsibility but also a strategic necessity for the continuity of ecosystems.



Industrial Animal Agriculture and Its Invisible Impacts

While wildlife often comes to mind when animal welfare is discussed, farm animals represent one of the most critical issues. Approximately 80 billion terrestrial animals are used in agricultural production each year. Factory farming systems harm animal welfare while simultaneously increasing deforestation, water pollution, and greenhouse gas emissions, thereby deepening both the climate crisis and biodiversity loss.



HOW WE TREAT ANIMALS IS HOW WE TREAT THE PLANET

The 2025 theme of World Animal Protection Day aims to make visible the impact of our attitudes toward animals on the planet. Viewing animals merely as "resources" is considered unsustainable from both ethical and ecological perspectives. In contrast, approaches that place animal welfare at the center contribute to the development of fairer, more resilient, and environmentally harmonious systems.

In this context, animals kept in captivity for entertainment and tourism—such as tigers, elephants, dolphins, and whales—also constitute a major area of concern. The goal is to return these animals to their natural habitats wherever possible; where this is not feasible, to establish sanctuaries that meet their physical and psychological needs.



PROTECTING ANIMALS ULTIMATELY MEANS PROTECTING WATER, SOIL, AIR, AND THE CLIMATE. IN OTHER WORDS, THE PATH TO PROTECTING THE PLANET RUNS THROUGH PROTECTING ANIMALS.

The World Has Crossed Its First Disaster Threshold Linked to Greenhouse Gas Emissions

Warnings about the climate crisis that have been issued for years are no longer scenarios about the future. A new scientific report titled “Global Tipping Points” reveals that the world has reached its first catastrophic threshold directly linked to greenhouse gas emissions. According to the report, warm-water coral reef systems have entered an irreversible process of collapse, a development that threatens not only ecosystems but also the lives and livelihoods of hundreds of millions of people.

Led by the University of Exeter, the report was prepared with contributions from 160 scientists working at 87 institutions across 23 countries. The findings show that the climate crisis has moved beyond being a “manageable risk” and entered a phase in which planetary thresholds are being crossed one by one.

What Does a Tipping Point Mean?

Scientists use the term “tipping point” to describe moments when a large ecosystem begins to deteriorate rapidly and inevitably after a certain threshold is crossed. Beyond this point, the ecosystem’s ability to recover is severely reduced or disappears entirely.

From this perspective, coral reefs are among the most fragile systems on the planet. Hosting approximately 25% of all marine species, these ecosystems are also vital for hundreds of millions of people through fisheries, tourism, and coastal protection services.



Coral Reefs on the Brink of Collapse

According to the report, coral reefs reach a tipping point when global temperatures rise 1–1.5°C above pre-industrial levels. The world has already warmed by approximately 1.3°C. The global coral bleaching event ongoing since January 2023 is described as the fourth most severe bleaching event on record.

Today, more than 80% of coral reefs in over 80 countries have been affected by extreme ocean temperatures. Scientists emphasize that reefs are facing conditions they have never encountered before. The report states that unless global temperatures are reduced to 1.2°C in the short term and then to 1°C, it will not be possible to meaningfully protect warm-water coral reefs.

Not Only Nature, but Humanity Is at Risk

The collapse of coral reefs has serious consequences not only for biodiversity but also for human life. Professor Tim Lenton of the University of Exeter stresses that hundreds of millions of people who depend directly on reefs are at risk in terms of fisheries, food security, and coastal protection.



Other Tipping Points Are Also Approaching

The warnings in the report are not limited to coral reefs. The West Antarctic and Greenland ice sheets are dangerously close to tipping points due to accelerating ice loss. Major ocean circulation systems and the Amazon rainforest are also under similar threat due to climate change and deforestation pressures.

Current emission projections indicate that the world faces a high risk of exceeding the 1.5°C threshold around 2030. Crossing this threshold increases the likelihood of triggering multiple tipping points simultaneously.

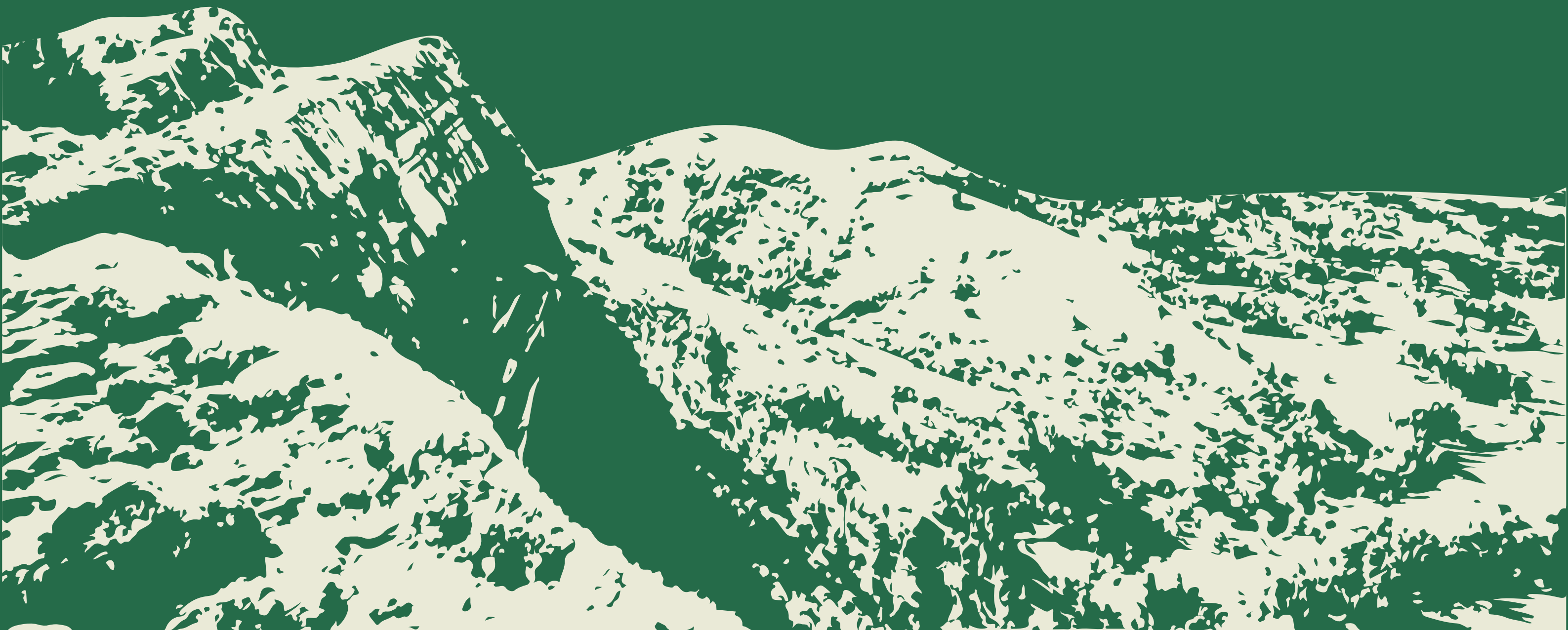
A Critical Decade

The “Global Tipping Points” report clearly demonstrates that the climate crisis is no longer an issue for future generations, but a challenge of today. The collapse observed in coral reefs is considered one of the first major irreversible impacts of greenhouse gas emissions on the planet.

The next few years will determine not only the fate of climate targets, but also the ecological stability of the planet itself.

REFERENCES

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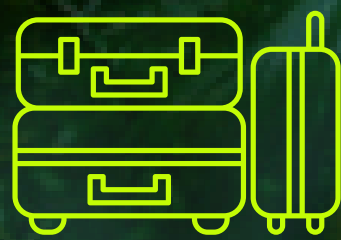


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