



Nature Needs You And We Need Nature Too

Discover why

Biodiversity on land and in the ocean is the variety of life on Earth.
This web of living things is the very fabric of life.

It cleans the **water** we drink.

Pollinates our **crops**.

Purifies the **air** we breathe.

Regulates the **climate**.

Keeps our **soils** fertile.

Provides us with vital **medicines**.

And offers many of the basic building blocks for **industry**.

Ecosystems on land and in the seas are the foundation of economies and societies. **More than half of the world's output depends on nature.**

When we destroy biodiversity, we destroy our life support system, sawing off the branch that we sit on.

Damaged ecosystems are fragile and can't cope with **extreme events** and **new diseases**. Well-balanced ecosystems on the other hand can **protect us**. And when we use them in a **sustainable** way, they offer many of the best solutions to urgent **challenges**.

By taking better care of nature, we can start to tackle and adapt to climate change, often at a very low cost.

Our own Age of Extinction

- Human activities have pushed the planet into a sixth mass extinction, with [one million species now at risk](#).
- More than half of all birds, mammals, reptiles, amphibians and fish have been lost in the space of just 50 years.
- Extinction rates around the world are now [100-1000 times higher](#) than in pre-human times – the largest extinction event since the dinosaurs were wiped out.

One third of all forests have been cut down since the pre-industrial era.

Tropical rainforests are being destroyed at an unprecedented rate – 13 million hectares, an area the size of Greece, is lost every year. Although they cover less than 7 % of the Earth's surface, rainforests house [an estimated 50 % of all life on land](#).



When it comes to ocean biodiversity, marine litter and plastics have a devastating impact. Marine species are disappearing at twice the rate of those on land. It's estimated that [up to 12 million tons](#) of plastic waste enter the oceans each year.

By 2050 the oceans could contain more plastic by weight than fish.

There are now more than 400 **dead zones** in oceans around the world, mainly as a result of fertiliser run-off entering our waters.



Soils host an astounding diversity of life: 25-30 % of all species on Earth live in soils for all or part of their lives. **Soil biodiversity is strongly impacted by human activities.** [Over 75 % of the Earth's land area is already degraded](#), and over 90 % could become degraded by 2050.



The decline in insects is particularly dramatic - [40 % of insect species could go extinct](#) in the next few decades. Insects are food for larger animals like birds and fish, and their loss will impact the entire food chain.

Many studies show these declines in [every corner of the globe](#).

So why is all this happening now?

Habitat loss, over-exploitation, climate change, pollution and invasive alien species all contribute to biodiversity loss.

The main reason behind the climate and ecological crisis is an **unsustainable pattern of production and consumption**, the cumulative effect of an economic model where we design, manufacture, use, and then throw away, rather than reducing, reusing or recycling.

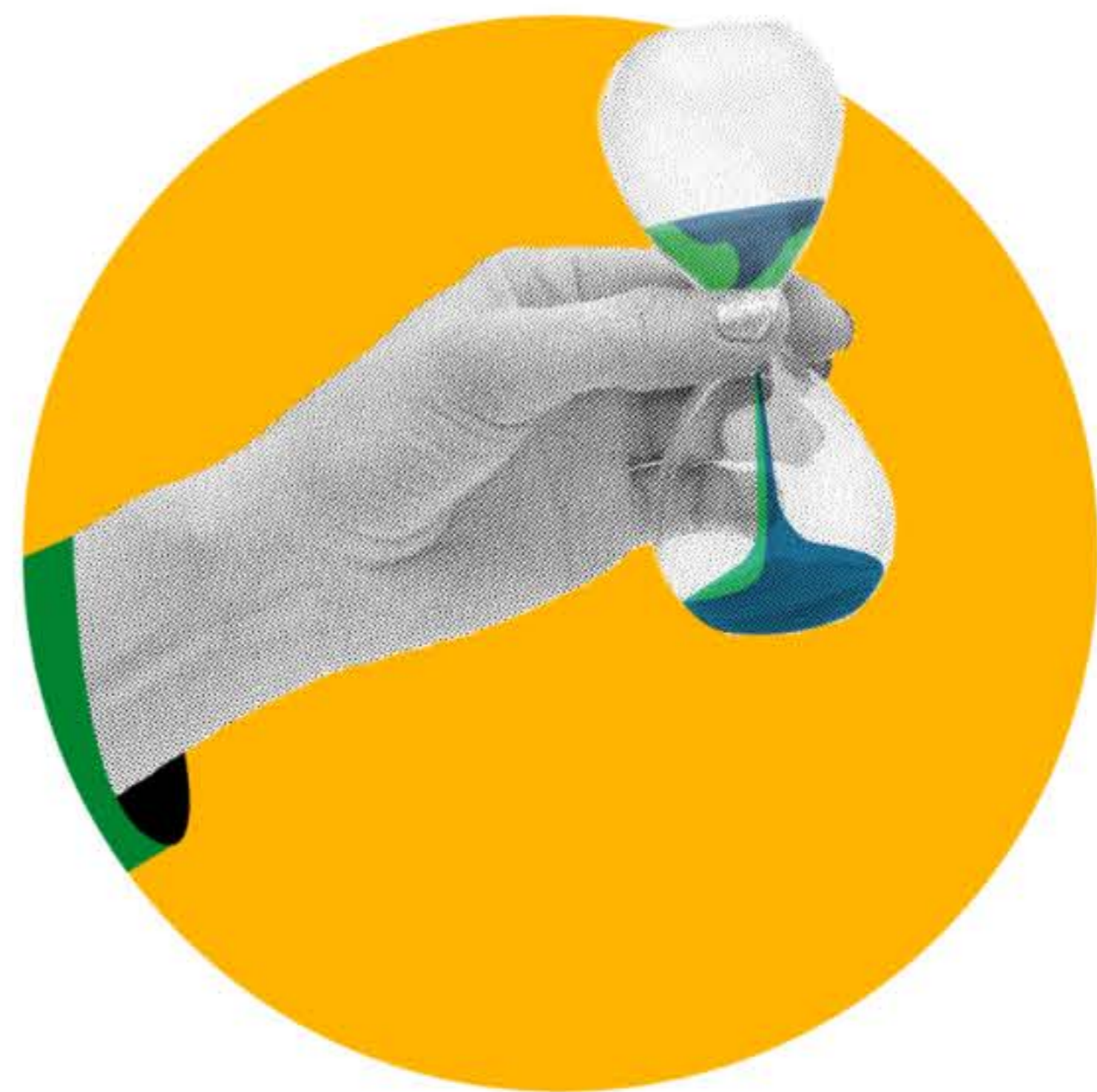
Demand for new resources is driving deforestation, changing patterns of land use, and destroying natural habitats everywhere. **Extracting and processing materials, fuels and food is the reason for 90 % of biodiversity loss** and half of all greenhouse gas emissions.

More than one third of the world's land surface and nearly three quarters of freshwater resources are now devoted to crop or livestock production. **Intensive agriculture** and forestry have led to a widespread use of pesticides and fertilisers, soil erosion and the replacement of virgin forests with agricultural land.

Degraded soils lose their capacity to retain water and carbon, leading to more floods and greenhouse gas emissions. Excess fertilisers find their way into the sea, choking marine life. Fewer spaces between fields and fewer varieties of plants mean far fewer insects, for example, and consequently fewer birds.

Urban areas have also expanded enormously, sealing soils and leaving less room for nature.

Earth Overshoot Day: *By 29 July 2024 we will have already used more resources than the Earth will replenish this year. Each year this date is calculated to remind us that our demands are exceeding the Earth's biological resources.*



Why it matters

The global decline of biodiversity poses **fundamental risks** to human well-being.

- It threatens our **food and water security**
- Jeopardises our **physical and mental health**
- Weakens our **economies**
- Threatens resilience to **natural disasters**
- Heightens the **risk of conflict**
- Exacerbates the **climate crisis**
- Degrades the beauty of the **natural world**

These effects will impact the most impoverished hardest. 1 in 5 people rely on wild species for income and food.

Biodiversity loss is a root cause of conflict and migration, something that affects the vital interests of all societies.

Failure for nature means failure for climate, security and sustainable development.



Our Food

Climate change and biodiversity loss are among the biggest threats to global and EU food security, and are already affecting farming.

Pollinators have [dramatically declined in abundance and diversity](#) in Europe. Yet most fruit and seed crops depend on them.

Without pollinators, food production for **animals** and **humans** will be severely affected and many **farmers** would see their profits drop or even go out of business. Pollinators contribute at least **€5 billion** per year to EU agricultural output.

Biodiverse and sustainable farming is more resilient to climate change, and means less need for chemical pesticides and fertilisers. Diverse farming helps spread economic risks



Our Health

Healthy ecosystems help significantly reduce pollution, filtering both water and air. This, in turn, is key to preventing non-communicable diseases like cardiovascular diseases and cancer.

When we destroy natural habitats, we bring wildlife in closer contact with livestock and people, enabling animal **diseases** to migrate to people and increasing the risk of **pandemics**.

Losing biodiversity means losing options for the future, like developing **new medicines**. Some 70 % of cancer drugs are either natural products or synthetic ones inspired by nature, and **four billion** people rely primarily on natural medicines.

Regular contact with nature reduces stress and promotes physical activity, improving mood, concentration and health.



Our world

Loss of biodiversity has an effect on the climate. Instead of storing carbon in soils and plants, damaged ecosystems release it back into the atmosphere. [Nature-based solutions](#), such as biodiverse reforestation, rewetting of peatlands and agroforestry, are among the most effective strategies for mitigating carbon emissions.

We are also **overfishing** and **polluting** our oceans. These ecosystems regulate our climate and our oxygen.

Up to [300 million people](#) already face a higher risk of **floods** and **hurricanes** because of a loss of coastal habitats and protection.

Nature loss is very bad news for Business

Biodiversity loss and ecosystem collapse threaten the foundations of our economy. Over [half of global GDP](#) depends on nature and the services it provides, with three key economic sectors – construction, agriculture, and fisheries – all highly dependent on it.

The world loses [trillions of euros per year](#) in ecosystem services from land degradation.

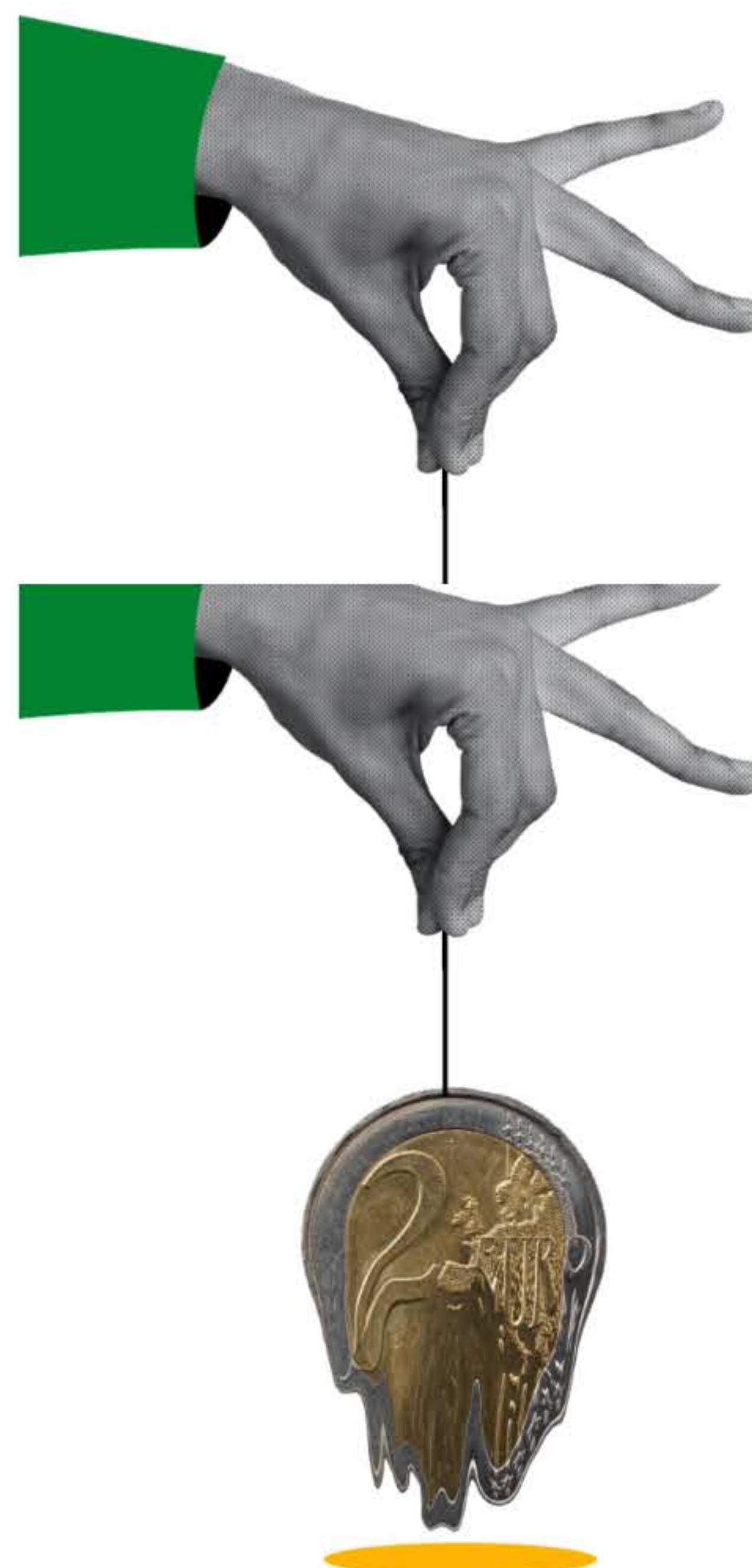
Businesses depend on natural resources and a stable environment, without which their supply chains and sources of finance cannot be guaranteed. **Food, fibres, and building material** are products of nature.

Investing in ecosystem restoration, with climate friendly agriculture or restoration of carbon-rich habitats, can bring direct benefits, as well as fighting climate change.

Conserving marine stocks could increase annual **profits** of the seafood industry by **billions of euros**.

Protecting coastal wetlands could save the insurance industry around **€50 billion** annually by reducing flood damage losses.

The EU's Natura 2000 network of protected areas alone supports thousands of jobs directly, in conservation activities, and millions of jobs indirectly in the key sectors of European agriculture and tourism.



What science is telling us

Ecosystems can only absorb pressure up to a certain point. Beyond that, a small increase can lead to a large, abrupt, change, with very negative and irreversible consequences for the environment and for society.

Thresholds are expected to be crossed more frequently in the coming decades in marine, freshwater and terrestrial ecosystems owing to increasing pressure from human activity. Maintaining or restoring biodiversity can make ecosystems more resilient.



Extinction Cascades

Biodiversity loss brings ‘**extinction cascades**’, where one species loss leads to another, which leads to another.



Feedback Loops

When we damage ecosystems, they release carbon instead of storing it. These “**feedback loops**” accelerate the process of climate change.



Tipping Points

Several major tipping points have been identified for the world’s environment, including the Greenland ice sheet, Alpine glaciers, desertified soils and coral reefs. These tipping points could constitute points of no return – the point at which self-reinforcing feedback loops begin, with a risk of environmental collapse.



What is the EU doing to help?

We need profound **changes** in the way we live and do business, from our energy systems and the way we use land, to buildings, cities, transport and food. We need to stop degrading resources and achieve **climate neutrality** by 2050.

The [European Green Deal](#) (EGD) provides an action plan to do this, by boosting the efficient use of resources and moving to a **clean, circular economy, restoring biodiversity and cutting pollution**.

A new [law on deforestation-free products](#) will ensure that consumption in Europe doesn't cause deforestation in other parts of the world. The proposed [nature restoration law](#) and the [soil monitoring law](#) aim to protect and restore Europe’s degraded ecosystems and soils.

A [solid legislative framework](#) is now in place which allows for the sustainable use of Europe’s seas.

But it isn't enough. We need to find more solutions and use them more widely and on a far greater scale. We need to implement them quickly, use **cleaner energy** sources, **cut deforestation** further, manage land better and switch to **sustainable agriculture**.

We need to slash new CO₂ emissions and start removing CO₂ from the atmosphere.

Photosynthesis by plants and plankton is the best carbon dioxide removal technology we have, so we need to protect and restore them.

We must include the concern for biodiversity in all policy decisions at all levels to ‘**bend the curve**’ of biodiversity loss.

The Kunming-Montreal Global Biodiversity Framework

In December 2022, 185 countries [agreed on an action plan to halt biodiversity loss](#) and preserve the conditions for life on Earth. The mission of the Framework is to take urgent action to halt and reverse biodiversity loss.

Since 1992, the EU's LIFE fund has contributed over €3 billion to nature projects.

The Kunming-Montreal Global Biodiversity Framework

In December 2022, 185 countries [agreed on an action plan to halt biodiversity loss](#) and preserve the conditions for life on Earth. The mission of the Framework is to take urgent action to halt and reverse biodiversity loss.

Since 1992, the EU's LIFE fund has contributed over €3 billion to nature projects.

The Kunming-Montreal Global Biodiversity Framework

In December 2022, 185 countries [agreed on an action plan to halt biodiversity loss](#) and preserve the conditions for life on Earth. The mission of the Framework is to take urgent action to halt and reverse biodiversity loss.

Since 1992, the EU's LIFE fund has contributed over €3 billion to nature projects.

The Kunming-Montreal Global Biodiversity Framework


In December 2022, 185 countries [agreed on an action plan to halt biodiversity loss](#) and preserve the conditions for life on Earth. The mission of the Framework is to take urgent action to halt and reverse biodiversity loss.

Since 1992, the EU's LIFE fund has contributed over €3 billion to nature projects.

The Kunming-Montreal Global Biodiversity Framework

In December 2022, 185 countries [agreed on an action plan to halt biodiversity loss](#) and preserve the conditions for life on Earth. The mission of the Framework is to take urgent action to halt and reverse biodiversity loss.

Since 1992, the EU's LIFE fund has contributed over €3 billion to nature projects.



American biologist Paul Ehrlich once compared the loss of species to randomly removing rivets from the wing of an aeroplane. The plane might continue to fly for a while, but at some point, there will be a catastrophic failure.

We still have time to turn the tide on biodiversity loss and avoid the worst impacts of climate change – providing we take real action fast and at massive scale.