TEKNOSA

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NEWS FROM AROUND THE WORLD

Fossil Fuel and Meat Advertisements Banned in Amsterdam



Amsterdam has become the world's first capital city to ban advertisements for fossil fuels and meat products in public spaces. Under the regulation, which entered into force as of 1 May, advertisements for flights, petrol and diesel vehicles, fossil fuel-based heating systems, and meat products will no longer be permitted on billboards, public transport vehicles, and other public advertising spaces.

The Municipality of Amsterdam stated that the decision aims to encourage consumption habits aligned with climate targets, while experts point out that advertising not only promotes products but also shapes social norms and consumer behaviour.

Following Amsterdam, several cities, including The Hague, Stockholm, Edinburgh and Sydney, have also introduced measures restricting or banning advertisements for products and services with high carbon footprints. Spain, meanwhile, is preparing to become the first country to impose a nationwide ban on advertisements for fossil fuels and short-haul flights.

UN Warns: Global Sand Demand Has Exceeded Sustainable Levels

A new report published by the United Nations Environment Programme (UNEP) reveals that demand for sand, the world's most widely used natural resource after water, has exceeded sustainable supply levels. According to the report, annual consumption of sand used in construction, infrastructure and industrial activities has reached approximately 50 billion tonnes, while demand is expected to double by 2060 if current trends continue.

UNEP highlights that the natural rate of sand replenishment remains far below the rate of consumption. In particular, intensive sand extraction from seabeds and coastal areas is damaging critical habitats for fish, sea turtles, birds and other species. According to the report, rising demand is also accelerating seabed dredging activities, with some operations reportedly taking place within protected marine areas.

New Concerns Over Microplastic Exposure

A new report published by Greenpeace has revealed that baby foods packaged in squeezable plastic pouches may contain thousands of microplastic particles per package. Based on independent laboratory testing, the research identified more than 11,000 microplastic particles in a single package of certain products, with some of these particles believed to have migrated directly from the packaging material into the food.

Another international report published on the subject shows that exposure to microplastics is not limited to food packaging. According to the research, infant formula, toys, household dust, paints, medical equipment and personal care products are also among the sources of microplastic exposure. Children and infants in particular are reported to be more vulnerable to microplastics because they breathe more air relative to their body weight and have greater levels of environmental contact during developmental stages.

Trump Administration Reviews PFAS Regulations

The U.S. Environmental Protection Agency (EPA) announced that it is considering removing or delaying the limits introduced in 2024 for certain PFAS compounds found in drinking water and commonly known as “forever chemicals” under the Trump administration. The decision has reopened debate over regulations concerning PFAS chemicals, which have long been on the agenda due to their potential effects on human health.

The regulations adopted during the Biden administration had established limits for six different PFAS compounds in drinking water and highlighted that these substances have been associated with certain types of cancer, immune system problems, reproductive health issues and developmental effects in children. The new regulatory proposal envisages removing limits for certain types of PFAS while extending the compliance period for others.



PFAS chemicals are used in a wide range of products, including non-stick coatings, food packaging, cosmetics and firefighting foams. Because they break down extremely slowly in nature, these substances can persist in the environment and water resources for long periods and are increasingly regarded as a growing environmental and public health concern worldwide.

WORLD ENVIRONMENT DAY THEME: CLIMATE ACTION

The United Nations Environment Programme (UNEP) has designated the theme of World Environment Day 2026 as "**Climate Action**." The global events, to be hosted by Baku, the capital of Azerbaijan, on 5 June, will bring together millions of people with a call for faster and more decisive action against the impacts of climate change.

While this year's theme draws attention to the increasingly visible impacts of the climate crisis, it also highlights positive developments in areas such as the energy transition, renewable energy investments, nature-based solutions and sustainable cities. According to UNEP, the key question is no longer whether change will happen, but how quickly and effectively this transformation will be managed.

World Environment Day is regarded as one of the most important global environmental platforms for raising awareness of environmental issues, as well as encouraging governments, companies and individuals to take concrete action. This year's events will also emphasize the importance of collective action against interconnected environmental crises such as climate change and ecosystem loss.

CHINA IS REDUCING ITS EMISSIONS FASTER THAN EXPECTED

BloombergNEF's 2026 New Energy Outlook report reveals that China is on track to reduce its greenhouse gas emissions faster than it had pledged while continuing its economic growth. According to the report, China's emissions are expected to decline by 17% by 2030 compared with 2023 levels.

As the world's largest greenhouse gas emitter, China had committed under the Paris Agreement to peak its carbon emissions before 2030 and achieve net-zero emissions before 2060. The new projections, however, indicate that the country's emissions could begin declining earlier and at a faster pace than expected.



The report highlights that the rapid increase in clean energy investments and concerns over energy security are accelerating the transition. In particular, declining costs in solar energy and energy storage technologies are cited among the key factors supporting greater use of renewable energy.

NEWS FROM TÜRKİYE

Istanbul’s Coastal Infrastructure Under Pressure from Climate Change

A new study conducted by Istanbul University’s Institute of Marine Sciences and Management has revealed that sea-level rise could pose significant risks to Istanbul’s ports, transport networks and coastal settlements. Based on IPCC climate projections and Geographic Information Systems (GIS)-based analyses, the study states that Istanbul is one of the **most vulnerable** port cities to climate change due to its coastline along both the Black Sea and the Sea of Marmara.



According to the research, if sea levels rise by approximately 1.5 metres by 2050, **around 70% of Istanbul’s ports** could be at risk. By the end of the century, all ports, more than 60% of railway networks and a significant portion of roads are projected to be affected. In particular, port and logistics facilities around Ambarlı, Haydarpaşa and Yenikapı are identified among the critical areas that could be affected by potential flooding.

Greenpeace Report: The Annual Cost of Coal to Türkiye Exceeds TRY 592 Billion

The “Hidden Cost of Coal in Türkiye” report published by Greenpeace Türkiye draws attention to the economic, environmental and social impacts of coal use. According to the report, the total annual cost of coal to Türkiye is estimated at approximately **TRY 592 billion**, corresponding to around **TRY 21,500** per household per year.

The report assesses the cost of coal under three main categories: subsidies and support provided by the government, health costs arising from air pollution and environmental impacts, and economic losses resulting from the preference for coal over renewable energy. According to the research, health and environmental impacts account for the largest share of these costs.

The 37 coal-fired thermal power plants operating in Türkiye generate approximately 34% of the country’s electricity, with a significant portion of this generation relying on imported coal. The report highlights that renewable energy sources are becoming increasingly competitive due to the cost reductions seen in solar and wind energy technologies in recent years.

Biodiversity Loss Is Accelerating

In a statement issued as part of **22 May International Day for Biological Diversity**, the TEMA Foundation drew attention to the fact that accelerating biodiversity loss worldwide threatens not only wildlife, but also the future of humanity. The Foundation emphasized that species loss has now reached approximately **1,000 times the natural extinction rate** and that around **1 million species** are at risk of extinction.

According to scientific data, vertebrate wildlife populations have declined by **73% over the past 50 years,** while **85% of freshwater ecosystems** have been lost. Experts state that ecosystems are becoming increasingly fragile due to the climate crisis, destruction of natural habitats, pollution, overconsumption and unplanned land use.



The TEMA Foundation emphasizes that biodiversity is not only about protecting species, but is also critically important for access to clean water, food security, climate resilience and human health. Under the United Nations' Kunming-Montreal Global Biodiversity Framework, the aim is to increase protected areas worldwide to 30% by 2030 and restore a significant portion of degraded ecosystems.



Türkiye Has Lost More Than Half of Its Grasslands Over the Past 65 Years

In a statement issued as part of the World Day to Combat Desertification and Drought, the TEMA Foundation highlighted that Türkiye has **lost 54% of its grasslands over the past 65 years.** According to the Foundation, meadow and pasture areas, which covered approximately 29 million hectares in 1960, have declined to 13 million hectares today, while the size of the area lost **exceeds twice the size of the Marmara Region.**

Experts point out that grasslands are critical ecosystems not only for livestock farming, but also for soil protection, maintaining the water cycle, carbon storage and biodiversity conservation. The degradation of grasslands increases the risk of erosion, intensifies pressure on water resources and deepens the impacts of drought.

According to the TEMA Foundation, the main causes of grassland loss include urbanization, mining activities, land-use changes and increasing pressures on natural areas. The Foundation also notes that a significant portion of Türkiye's grasslands are in a degraded and low-productivity condition, emphasizing the importance of grassland restoration efforts for food security and sustainable livestock farming.

Published at a time when the United Nations has declared 2026 the "**International Year of Rangelands and Pastoralists,**" the statement draws attention to the critical role of grasslands in combating climate change, desertification and drought. Experts state that protecting natural grassland ecosystems is strategically important not only for rural development, but also for the future of water resources, food security and biodiversity.

NEWS FROM TEKNOSA

We Celebrated 5 June World Environment Day with Sustainability Week

As Teknosa, throughout Sustainability Week, which we organized as part of 5 June World Environment Day, we carried out various activities aimed at raising environmental awareness and encouraging sustainable living habits.

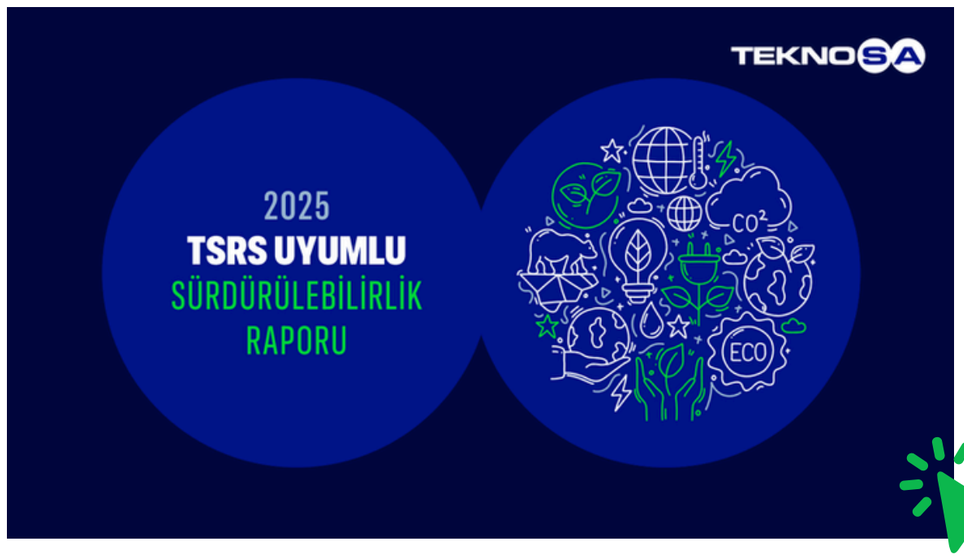
Throughout the week, information on sustainability was shared through social media posts, digital screen communications and e-mail announcements, while sustainability-themed games, prize-winning puzzles and awareness activities were organized with the participation of our employees. In addition, electronic waste collection activities contributed to the circular economy, while also aiming to promote environmental responsibility awareness.







We Published Our 2025 TSRS-Compliant Sustainability Report



We published our 2025 TSRS-Compliant Sustainability Report, which we prepared to transparently share the progress in our sustainability journey. In our report, we comprehensively address the climate-related risks and opportunities we assess within the scope of our activities, their impacts on our business strategy, and the actions we have taken accordingly.

You can access our report through our digital channels and review in detail the steps we are taking for a sustainable future.

ARE CIRCULAR ECONOMY PROMISES BEING FULFILLED?



Recycling plastic waste has long been presented as one of the most important solutions to plastic pollution. From consumers and companies to local governments and policymakers, many stakeholders operate on the assumption that plastic packaging can be brought back into the economy through recycling. However, research and industry data published in recent years have raised significant questions about the effectiveness of plastic recycling systems.

The "Plastic Merchants of Myth" report published by Greenpeace USA argues that plastic recycling has failed to deliver the expected performance from technical, economic and environmental perspectives. According to the report, despite decades of investment and awareness campaigns, plastic recycling rates remain low, while plastic production and the associated volume of waste continue to increase.

Why Is Plastic Recycling Failing to Deliver the Expected Results?

While materials such as paper, glass and metal can be recycled many times, plastics are made up of different types of polymers, each requiring different recycling processes. In addition, colourants, additives and chemicals added to plastics make recycling processes more complex.

According to the data presented in the report, only around **5%** of plastic waste in the United States is recycled. The majority of the waste is sent to landfills, incinerated or exported to other countries. Recycling capacity is reported to be particularly limited for single-use plastic products.

The Circular Economy Approach Is Being Reassessed

The main objective of the circular economy is to keep products and materials within the system for as long as possible. While recycling is an important tool in achieving this objective, it is not considered sufficient on its own. Reducing waste generation at source, developing reuse models and eliminating unnecessary packaging are becoming increasingly important.

In particular, refillable packaging systems, reusable product designs and packaging-free sales models are identified by many experts as more effective solutions to plastic pollution.

Waste Trade and the Debate Over Global Responsibility

The management of plastic waste is not an issue limited solely to recycling capacity. In recent years, the export of plastic waste that cannot be processed or economically recycled in developed countries to other countries has become an important topic on the international environmental policy agenda.

Türkiye has also been among the countries that have stood out in plastic waste imports for many years. This situation has brought with it various debates regarding waste management capacity, environmental impacts and the effectiveness of circular economy practices.

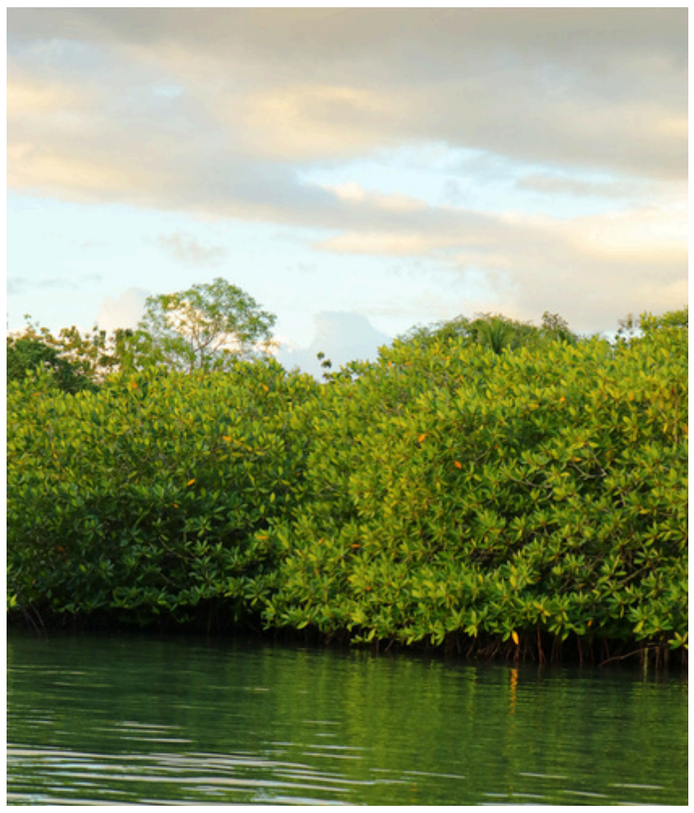
The Future Agenda: Less Plastic, More Reuse

The negotiations on the Global Plastics Treaty led by the United Nations are considered one of the important indicators of this transformation. In the fight against plastic pollution, the key priorities for the coming period include not only managing waste, but also reducing unnecessary plastic use, expanding reuse systems and transforming product design.

At this point, the main question is increasingly shifting from how plastics can be recycled to how plastic use can be reduced and how resources can be used more efficiently. The success of the circular economy will also largely depend on the answer to this question.

AFRICAN FORESTS HAVE CEASED TO BE A CARBON SINK FOR THE FIRST TIME





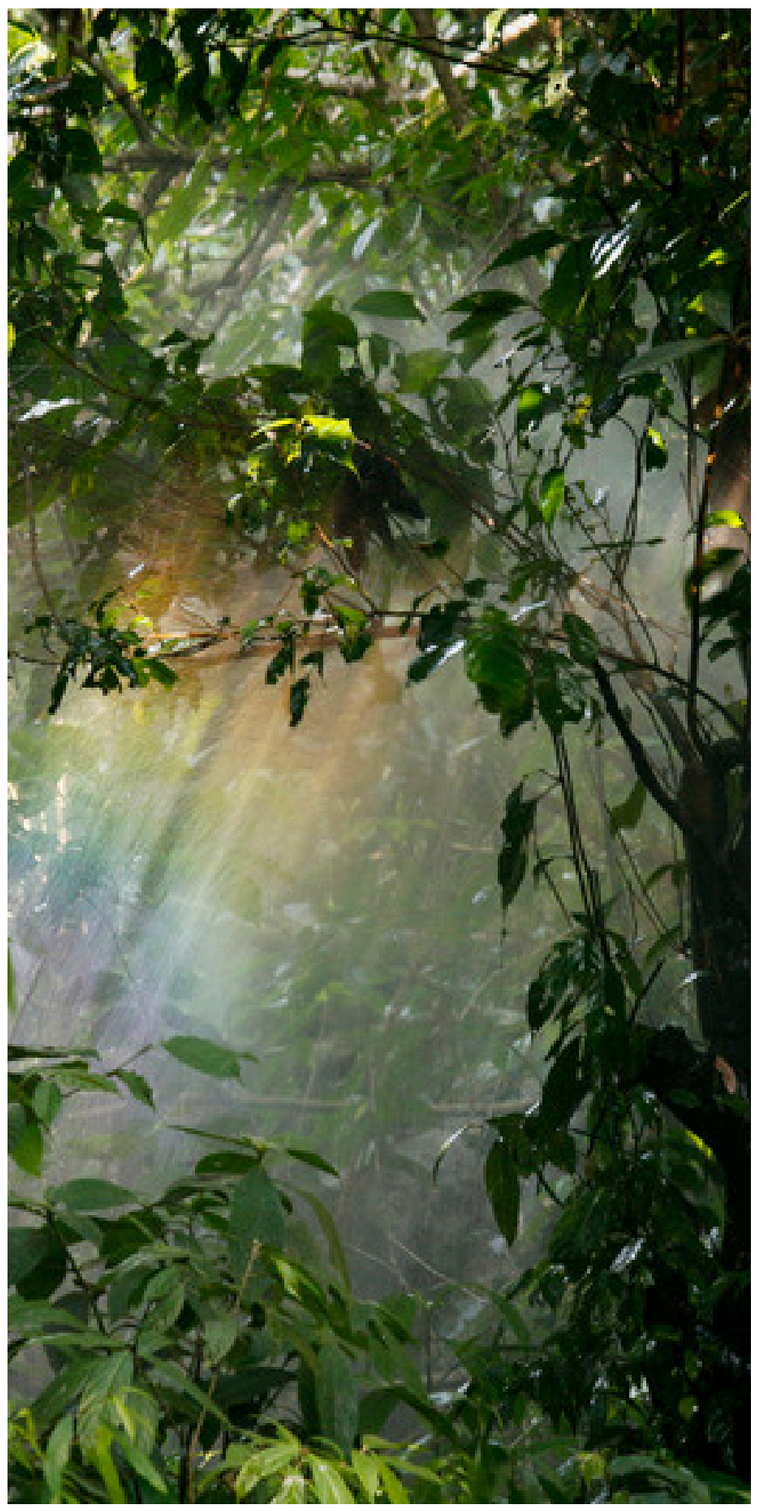
African forests, which play a critical role in combating climate change, have reached an important **tipping point** in their carbon balance. A new study led by the universities of Leicester, Sheffield and Edinburgh and published in the journal Scientific Reports has revealed that African forests are now **causing more carbon to be released** rather than absorbing carbon from the atmosphere.

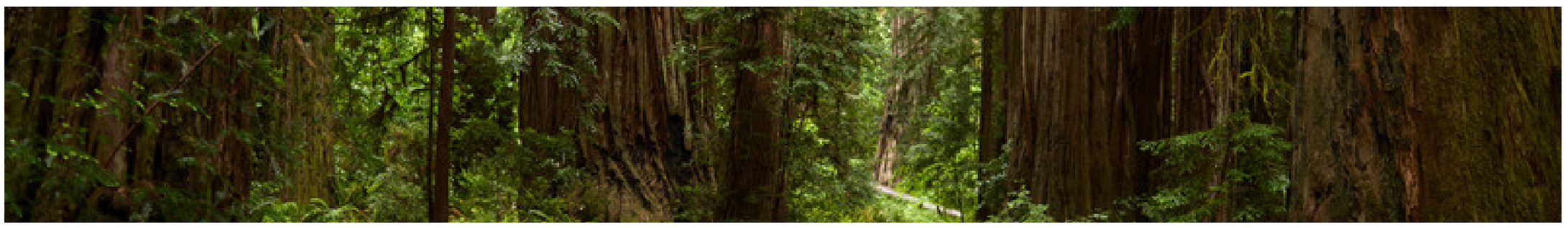
Researchers analysed changes in forest biomass across the continent using NASA's GEDI laser system, Japan's ALOS radar satellite data and machine learning methods. The results show that African forests, which increased their carbon storage capacity between 2007 and 2010, **began losing carbon after 2010 due to intensive deforestation and forest degradation.**

According to the study, the African continent lost approximately **106 billion kilograms** of forest biomass each year between 2010 and 2017. The largest losses occurred in the Democratic Republic of the Congo, Madagascar and the tropical rainforests of West Africa. Although limited gains were observed in some savanna areas due to increases in shrubs and vegetation, these gains were not sufficient to offset the losses in tropical forests.

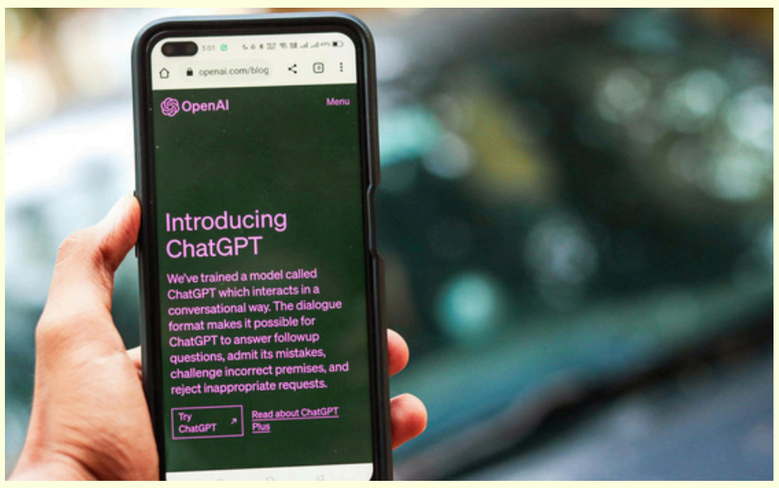
Scientists point out that the loss of forests' carbon sink function could have significant consequences not only at the regional level, but also for global climate targets. Forests are among the most important ecosystems that help limit the impacts of climate change by naturally storing carbon dioxide from the atmosphere. For this reason, the transformation of African forests into a carbon source is regarded as a development that could make it even more difficult to achieve the Paris Agreement's goal of keeping temperature rise below 2°C.

The research also highlights the importance of financing mechanisms for the protection of tropical forests, which were brought to the agenda as part of the COP30 Climate Summit. Experts emphasize the need to prevent illegal logging, strengthen forest management and accelerate restoration programmes aimed at reforesting millions of hectares across Africa.





WHAT WILL BE THE COST OF DIGITAL TRANSFORMATION?



Artificial intelligence has become one of the fastest-growing technologies of recent years. Although it is often perceived solely as a digital technology, it actually relies on an infrastructure built on data centres, high-performance processors, energy generation facilities, cooling systems and the use of large amounts of natural resources. **As artificial intelligence becomes more widespread, the energy and water demand of data centres is increasing rapidly, while the sector's carbon footprint continues to grow.**

A new report published by the United Nations University Institute for Water, Environment and Health provides a comprehensive assessment of the environmental impacts of artificial intelligence. According to the report, data centres consumed approximately **448 terawatt-hours of electricity in 2025.** While this amount exceeds the annual electricity consumption of many countries, if data centres could be considered as a country on their own, they would rank as the **11th-largest electricity consumer in the world.**

Pressure on Water Resources Is Increasing

One of the issues often overlooked in discussions around artificial intelligence is water consumption. Intensive cooling systems are required to keep the servers used in data centres operating continuously, and these systems consume significant amounts of water.

According to the report, data centres consumed enough water last year to fill approximately **1.8 million Olympic-sized swimming pools.** If the use of artificial intelligence continues to grow at its current pace, the sector's annual water consumption is projected to reach **9.3 trillion litres by 2030. This amount is equivalent to the annual basic water needs of approximately 1.3 billion people living in Sub-Saharan Africa.**

Data Centres and Environmental Justice Debates

The environmental impacts of artificial intelligence are not limited to resource consumption. The **impacts on air quality, energy infrastructure and public health** in regions where data centres are located are also being questioned increasingly.

One of the most recent examples is a lawsuit filed in the United States concerning a data centre owned by Elon Musk's artificial intelligence company xAI. Environmental organisations and local communities argue that the gas turbines supplying energy to the data centre are increasing air pollution and that there are concerns regarding the permitting processes. The case demonstrates that artificial intelligence infrastructure should be assessed not only as technological investments, but also together with their environmental and social impacts.



Is Sustainable Artificial Intelligence Possible?

While experts draw attention to the environmental impacts of artificial intelligence, they also emphasize that the benefits offered by the technology should not be overlooked. Artificial intelligence can make significant contributions to sustainability efforts in areas such as energy efficiency, smart grids, climate modelling, logistics optimisation and resource management.

However, the environmental costs emerging alongside the growth of the sector also need to be managed. For this reason, many experts and international organisations argue that the use of renewable energy in data centres should be increased, energy and water efficiency should be improved, and companies should provide more transparent reporting on their environmental impacts. The United Nations report also calls on technology companies to disclose their environmental footprints, while recommending that users act more consciously regarding resource-intensive operations.

REFERENCES

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