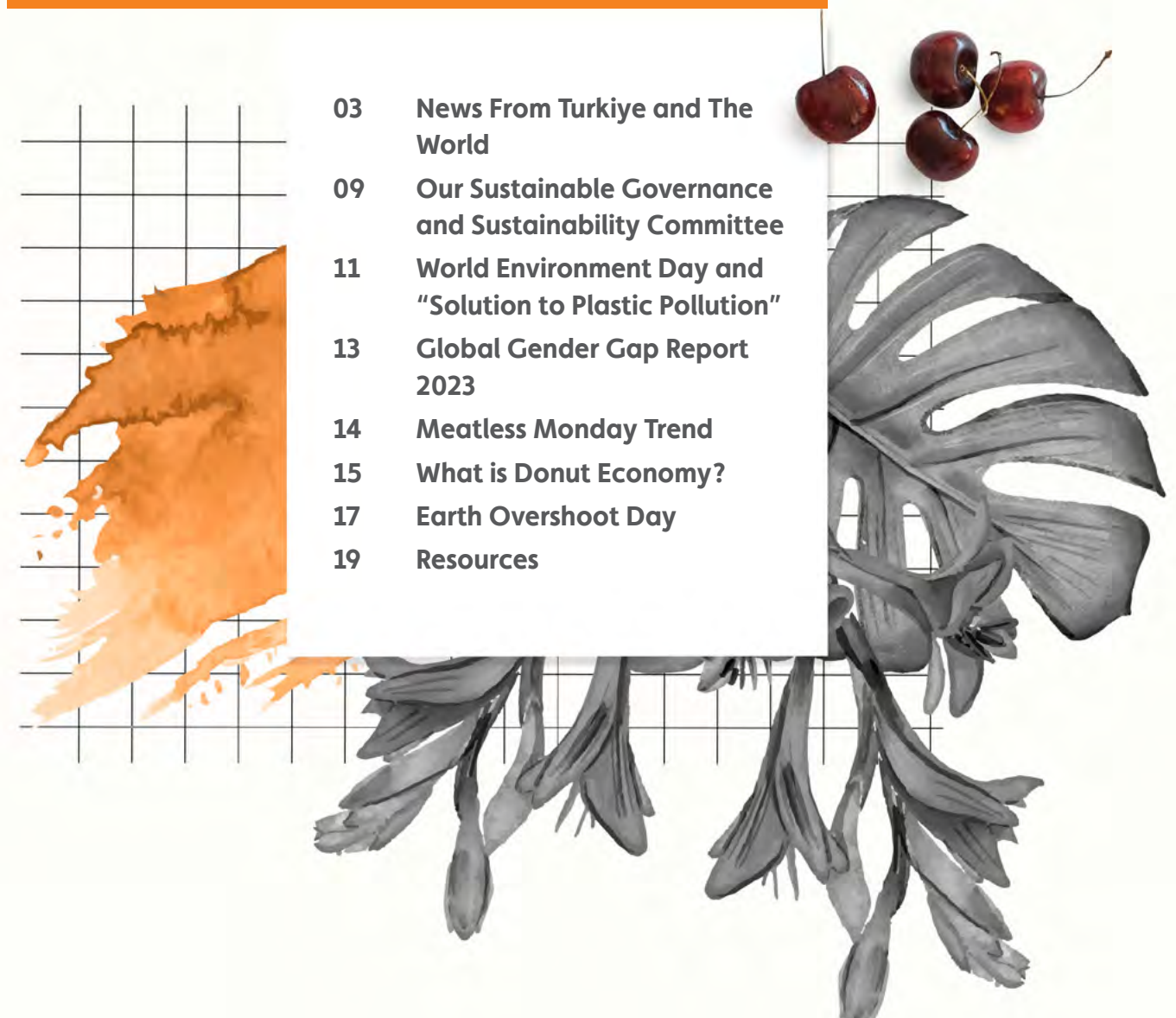


Sustainability Bulletin



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News From Türkiye and the World

Pollution Danger in

THE MEDITERRANEAN SEA

Agricultural, industrial, plastic and domestic wastes cause pollution in Mersin Bay. The officials of the Provincial Directorate of Environment, Urbanization, and Climate Change determined that the source of these domestic waste is Lebanon and Syria. Domestic wastes poured into the sea in these regions reach Mersin Bay within 3 weeks due to currents and wind directions. In addition, the pollution caused by the increasing number of plastic processing facilities in Adana, is carried to Mersin by currents and winds. Prof. Dr. Süleyman Tuğrul from METU Marine Sciences Institute, stated in the "Clean Mediterranean, Clean Mersin" panel that it is not possible to recover the areas where pollution is most common in the Eastern Mediterranean, but it is in our hands to slow down the pollution.



Ecological Status

The Environmental Performance Index (EPI), prepared by Yale University, provides a data-driven summary of the state of sustainability around the world. Using 40 performance indicators in 11 different categories, EPI lists 180 countries' climate change performance, environmental health (air quality, drinking water and sanitation, waste management and heavy metals) and ecosystem vitality (biodiversity and habitat, ecosystem impacts, fishery, agriculture, acid rain and water resources) target policies and subcategories. These indicators provide a **nationwide** gauge of how close countries are to established environmental policy targets.

In the 2022 Environmental Performance Index, Türkiye ranks 172nd in environmental health and 176th in ecosystem vitality among 180 countries. Türkiye, which ranks 166th in efforts to reduce the negative effects of climate change, is progressing negatively in the trend of change.

CALIFORNIA

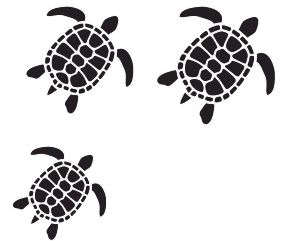


SUBMERGING

Research has shown that by the end of this century, 70% of California's coast will be under water. The shape of the coastline in 2100 was estimated in the study, which used satellite images of the last 20 years and sea level rise models that will result from the climate crisis. It has been determined that 31 to 67% of the beaches are susceptible to extinction with the expected coastal erosion.



Law for Turtle Rights



Panama has passed a law that guarantees the right to life and a safe place for leatherback and hawksbill sea turtles. The law gives turtles the right to an environment free from factors such as the climate crisis, hunting, pollution and unregulated tourism. The government hopes that this law will be an incentive to protect endangered animals in other countries as well.

Deadly Heatwaves Will Continue to Rise



Scientists state that if policies to limit global warming are not implemented, every 0.1 °C warming will mean 140 million people will be exposed to extreme weather conditions. Prolonged temperatures will increase mortality rates, spread infectious diseases and reduce labor productivity and harvests. Populous countries such as India, Nigeria, Indonesia and the Philippines will be more affected by the deadly heatwaves.

Record-Shattering Heatwaves in **Asia**

Reaching a temperature of 44.1 °C in May, Vietnam broke temperature records. Similar record temperatures were seen in other Asian countries in April. Thailand reached 44.6 °C, while in Bangladesh, temperatures were recorded as 4 °C above normal in some regions. **The Intergovernmental Panel on Climate Change (IPCC) report** published by the United Nations said that increases in global warming will intensify multiple and simultaneous dangers.



Lakes Are Drying Up

Many of the world's lakes have shrunk in the last 30 years, losing 22 gigatons of water. According to the research published in the Science journal, 56% of water loss in natural lakes is due to global warming and human consumption. The Caspian Sea, the largest inland water body, narrowed, accounting for 71% of the decrease in natural lake volume and 49% of the total water loss.

A Paris Agreement for Plastics

In the negotiations held in Paris with the participation of 175 countries and NGOs, it was decided to create an international agreement aiming to end plastic pollution. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has decided to prepare the draft of this agreement by November 2023. With this agreement, it is aimed to control the process of plastic from production to recycling and to prevent environmental pollution.



First Event That Aims

Zero Waste to Landfill



Efforts have been started to ensure that the UEFA Champions League Final, which will be held in 2026, will be the first organization where waste is not sent to landfills. Aiming to reduce the impact on the environment and increase resource efficiency, UEFA adopts the “reduce, reuse and recycle” approach.

At the event, it is aimed to prevent plastic consumption with biodegradable, plastic-free and fully recyclable fiber cups, and to collect waste with a deposit system. Also, it is planned to place 220 recycling bins in the stadium, which will enable the collected waste to be separated properly.

Coldplay's

Eco-Friendly Tour

Coldplay has started to work to ensure sustainability and low carbon emissions during its tours. The group has committed to reducing the tour's direct emissions by more than 50% compared to its previous tours (2016-2017). To reduce the carbon footprint of the tour; projects based on afforestation, restoration and protection of ecosystems damaged by human intervention, soil regeneration, carbon capture and storage, and renewable energy will be supported. As part of this commitment, the tour supports the planting and preservation of millions of new trees for life by promising to plant one tree for every ticket sold.

The band is proceeding as Zero-Waste in the planning of the tour. The stages are constructed from a combination of lightweight and low-carbon materials that can be reused or recycled appropriately at the end of the tour. Even the reusable LED wristbands that the audience wears as part of the show are made from 100% compostable, plant-based materials.



The Value of Women

in Sustainable Consumption and Production

The APEC Women's Leadership Forum published a report titled **"Observation of the Value of Women in Sustainable Consumption and Production"** and revealed that women underestimate their understanding of sustainability, but prioritize their environmental, social and governance (ESG) goals. The report examined the role of women in advancing sustainability as both producers and consumers.



Regarding responsible consumption, it was seen that women rated being "eco-friendly" as a higher priority than men.

How Countries Are Coping with Climate Change?

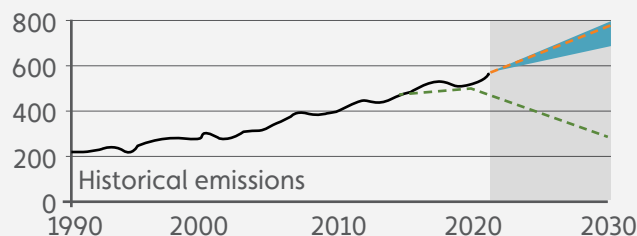
Countries that strive to mitigate the effects of climate change make commitments each year to limit their greenhouse gas emissions, but the world is still warming. With the increase in temperature, destructive natural events such as heat waves, fires and floods are occurring more frequently and more strongly.

Scientists have announced that the 1.5-degree limit of global warming will most likely be exceeded within the next 5 years.

The most important question today is whether we can limit global warming to 1.5 degrees. More comprehensive and effective measures are needed to achieve this goal. Global cooperation and coordination are of great importance to combat climate change. The countries that came together at the Bonn Climate Conference shared their promises before COP28, which will be held between on November 30 and December 12, 2023, organized by the United Nations.



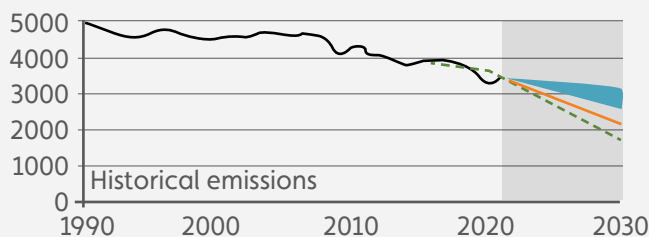
■ Current policies
 ■ Promises
 ■ What needs to be done to limit the warming to 1.5 degrees



Source: Climate Action Tracker, May 2023 **B B C**

With our current policies, Türkiye is on the way to keep their promise to limit greenhouse gas emissions by 2030, but this promise does not comply with the goals of limiting global warming to 1.5 degrees.

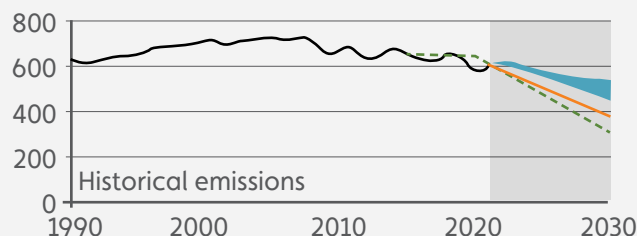
■ Current policies
 ■ Promises
 ■ What needs to be done to limit the warming to 1.5 degrees



Source: Climate Action Tracker, May 2023 **B B C**

The European Union does not appear to be on track to keep their emissions limit promise by 2030. They also do not move in line with the goal of limiting global temperature rises to 1.5 degrees.

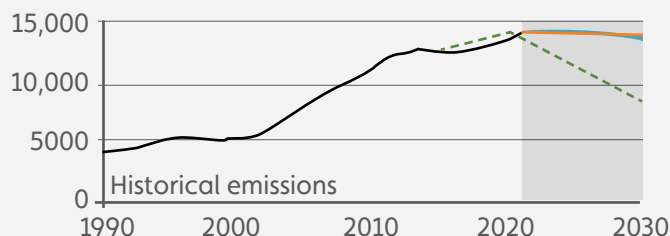
■ Current policies
 ■ Promises
 ■ What needs to be done to limit the warming to 1.5 degrees



Source: Climate Action Tracker, May 2023 **B B C**

Although the United States is ahead of the European Union in emissions, they do not seem to keep their emissions limiting promise by 2030, nor do they move in line with their goal of limiting global warming to 1.5 degrees.

■ Current policies
 ■ Promises
 ■ What needs to be done to limit the warming to 1.5 degrees



Source: Climate Action Tracker, May 2023 **B B C**

China has the highest greenhouse gas emissions of any country. It seems to be on track to keep their emission limit promise by 2030 with their current policies, but this promise is not in line with the goal of limiting global warming to 1.5 degrees.



Our Sustainable Governance and Sustainability Committee



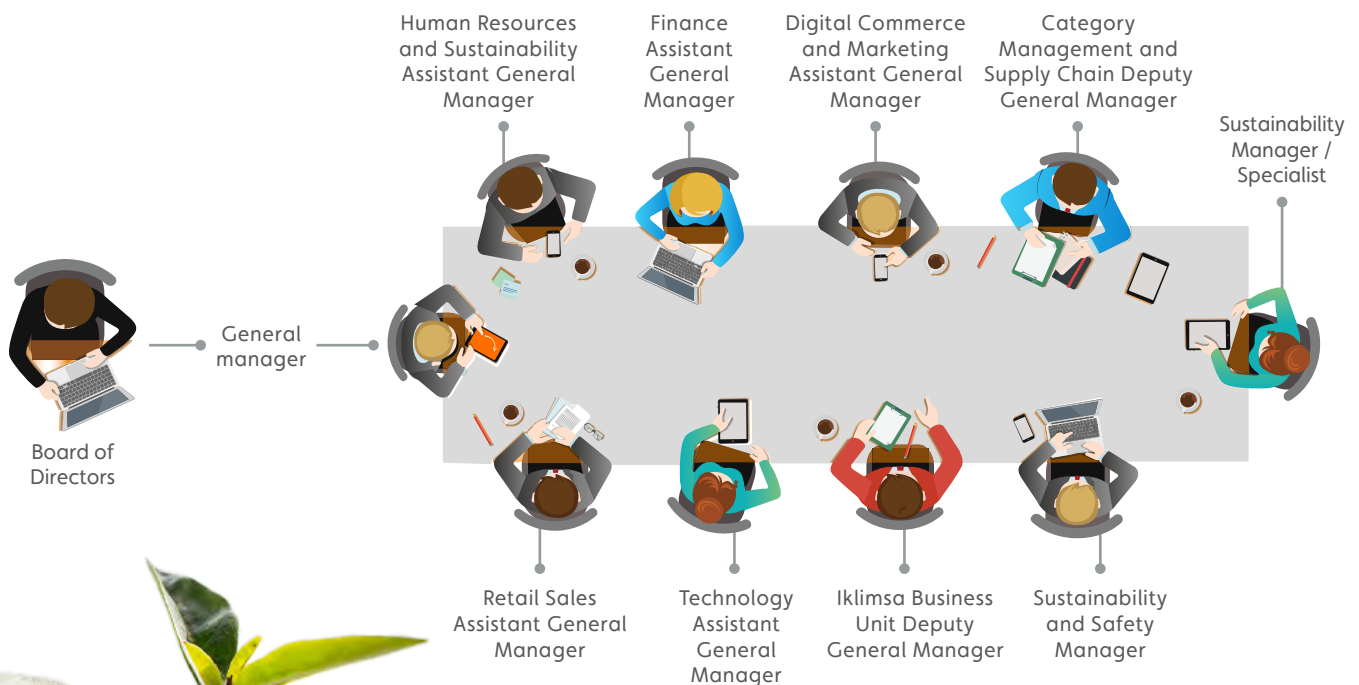
Sustainable governance is an effective management and decision-making process based on environmental, social and economic sustainability principles. In sustainable governance, public institutions, private sector companies, non-governmental organizations and other stakeholders work in cooperation to address social problems and develop strategic solutions for a sustainable future.

Sustainable governance focuses on sustainability goals such as protecting environmental resources, tackling climate change, ensuring social justice, maintaining economic growth and prosperity. It gives importance to principles such as relying on scientific data, gender equality and fighting against poverty in decision-making processes. Sustainable governance aims to transform management processes to improve people's quality of life and create a better world for future generations.

Four basic principles are important to ensure good corporate governance: transparency, accountability, responsibility, fairness and equality. Cooperation in accordance with these principles should be taken into account in ensuring sustainability with corporate governance. In addition to structuring in accordance with these principles, the establishment of an internal control system in enterprises and the integrated execution of audit activities are also important to ensure the sustainability of the business.

In order to ensure sustainable governance, we established our Sustainability Committee with the approval of senior management.

Our Sustainability Committee, consisting of our General Manager, Assistant General Managers, Sustainability and Occupational Safety Manager and Sustainability Executive; will carry out the tasks of determining the sustainability strategy of our company in the fields of environmental, social and corporate governance (ESG), creating the policy, target and implementation plans in the field of sustainability, fulfilling the duties of execution, monitoring, auditing, reviewing and development, and informing the Board of Directors when necessary.

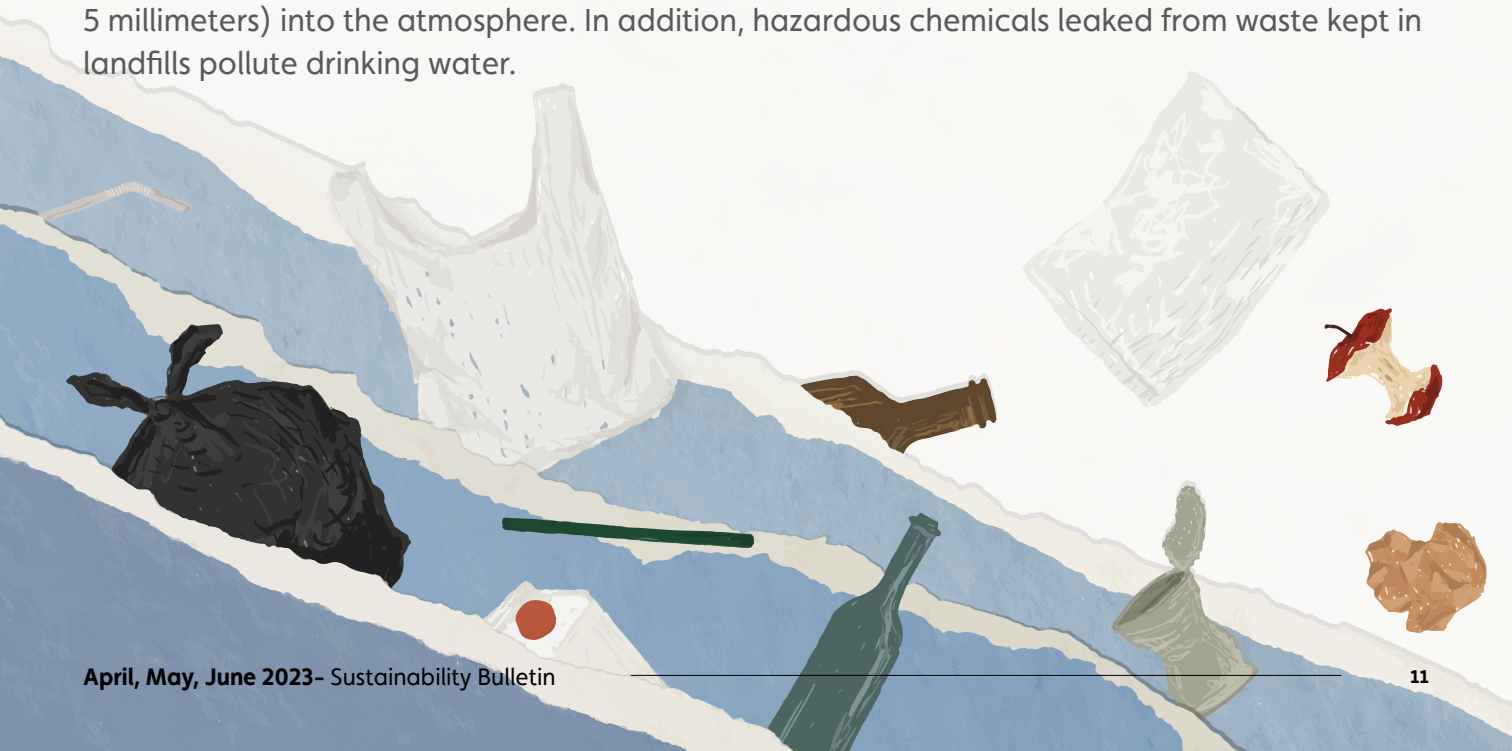


World Environment Day and Solution to Plastic

World Environment Day is celebrated with the theme “Solution to Plastic Pollution” this year. Before the World Environment Day events, which will be held for the 50th time, the **United Nations Environment Program (UNEP)** published a report and offered solutions for the prevention of plastic pollution on a global scale. The report, states that unnecessary plastic production should be stopped in order to reduce plastic pollution to a large extent by 2040, proposes a 3-stage plan in the continuation of the report.

According to the report, pollution can be reduced by 30% by 2040 if plastic products are reused with refillable bottles and depository practices. If recycling becomes more profitable and feasible, the rate of recyclable plastic can be increased from 21% to 50%. A 17% reduction in plastic pollution can be achieved by replacing plastic packaging products with paper or recyclable materials.

Today, unfortunately, it is not possible to say that the plastic waste problem is managed effectively across the world. Because only a small fraction of the hundreds or even thousands of different types of plastic can be recycled efficiently. A significant portion of the waste cannot be collected and most of it is either incinerated or accumulated in landfills. Incineration of plastics releases harmful gases and microplastics (plastic particles smaller than 5 millimeters) into the atmosphere. In addition, hazardous chemicals leaked from waste kept in landfills pollute drinking water.



Annual global plastic production has doubled in last 20 years, reaching 460 million tons. It is predicted that plastic pollution will increase threefold by 2060 if the necessary measures are not taken.

If plastic pollution continues at this rate, it is estimated that by 2050 there will be more plastic than fish in the oceans.

To tackle this problem, investment in waste management and recycling systems, reduction of plastic use, preference for reusable products and development of conscious consumption habits are required. In addition, we must understand that plastic waste production is a global problem, and we must find solutions through international cooperation.

There are also steps that each of us can take individually to reduce plastic waste;



- We can use canvas or cotton tote bags instead of plastic bags.
- We can turn to reusable alternatives instead of disposable plastic products.
- We can separate recycling wastes correctly.
- We may not buy products that we don't really need.
- We can make informed shopping choices.

Combining these small steps can make a big difference and have a significant impact on reducing the plastic waste



Global Gender Gap Report



According to the report published by the World Economic Forum, the pace of progress in addressing gender inequality has slowed considerably compared to previous years. The report measured the change in gender inequality in 146 countries in 4 key areas: "economic participation and opportunity", "educational attainment", "health and survival" and "political empowerment".

Economic Participation and Opportunity

Estimated earned income

Wage equality for similar work

Professional and technical workers

Legislators, senior officials and managers

Labour force participation rate

Political Empowerment

Years with female/male head of state (last 50)

Women in ministerial positions

Women in parliament

How is The Global Gender Gap Calculated?

These are the parameters taken into account when calculating Global Gender Gap Index scores

Educational Attainment

Tertiary education enrollment

Primary education enrollment

Secondary education enrollment

Literacy Rate

Health and Survival

Sex ratio at birth

Healthy life expectancy

The Global Gender Gap has closed by just 0.3% from 2022. Since the World Economic Forum began publishing the report in 2006, there has been only a 4.1% improvement in gender equality.

It was found that if progress towards eliminating gender inequality continues at the current pace, the gap can only close in 2154, that is, in 131 years. Although 100% gender equality has not been achieved in any country in the world, Iceland ranked first among 146 countries with 91.2%, and was the country with the highest rate for 14 years in a row. Afghanistan was the country with the lowest gender equality with 40%, while Chad, Algeria, Iran and Pakistan were at the bottom of the list with 57%.

Turkiye ranked 129th in gender equality with 63.8%.

Meatless Monday Trend

Agriculture (especially livestock) and diet (i.e. eating meat and dairy products) are becoming major sources of emissions in our developing world. There are indisputable links between food production and the increase in greenhouse gases, and more than a quarter (25 to 30%) of global emissions come from our food system.

According to the Food and Agriculture Organization of the United Nations (FAO), livestock accounts for 14.5% of all anthropogenic emissions (7.1 gigatons of CO₂ equivalent per year). The FAO says that cows raised for meat and milk are responsible for more emissions than any other living creature, accounting for about 65% of livestock emissions.

Known worldwide as “Meat Free Monday” or “Meatless Monday” movement first emerged in America during World War II and has come back on the agenda in order to reduce the effects of global warming. The “Meat Free Monday” trend is supported in more than 40 countries. San Francisco, Miami, Los Angeles, and Sao Paulo are among the cities that support this agreement and take action. For example, the state of New York began legally mandating “Meatless Monday” in schools last year.

With the Meatless Monday movement, you can affect the following factors by not consuming meat just one day a week:

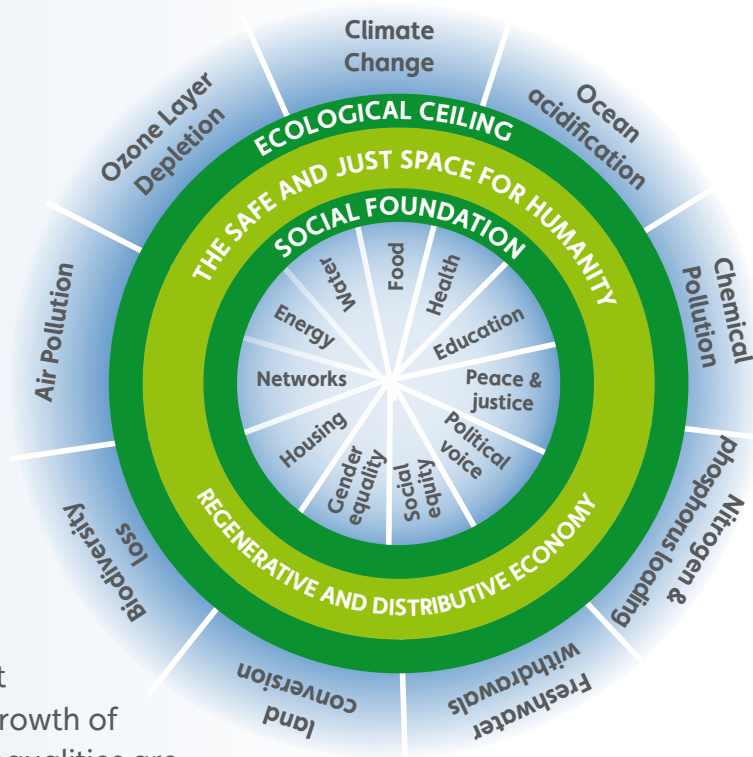
- You can contribute to the control of greenhouse gas emissions.
- You can help reduce global warming.
- You can contribute to the reduction of energy used for animal protein production.
- You can support the protection of agricultural areas and the reduction of water consumption.

Not consuming meat once a week for a year; is equivalent of saving 789 tubs of water, protecting 2.9 tennis courts-sized forests, or saving greenhouse gases equivalent to driving 698 kilometers.

You can calculate your impact on Meatless Monday using the calculator available on the website <https://www.meatfreemondays.com/>.



What is Donut Economy?

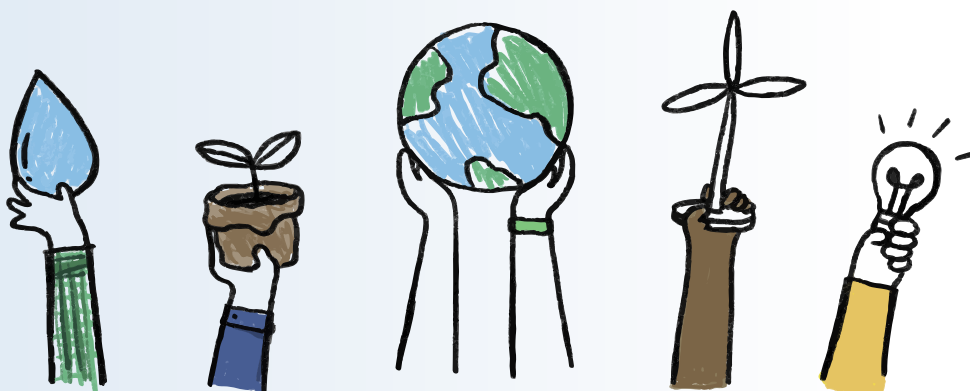


The Donut economic model is an economic model that aims to strike the balance between environmental sustainability and social justice. Developed by British economist Kate Raworth, this model suggests that the growth of existing economic systems and increasing inequalities are unsustainable.

The model is represented by a graph that looks like a donut shape. While, the inner circle represents the minimum social elements (nutrition, water, health, education, etc.) required to meet people's basic needs, the outer ring represents the planet's natural resources and environmental limits (climate change, water use, biodiversity, etc.).

The inner part of the donut is the safe and just space for humanity, where people's basic needs are met and social justice is provided. The outside of the donut is the "unsustainability" zone, where environmental limits are exceeded and resources are overused. The intersection of the inner and outer rings of the donut represents a sustainable and fair economy.

In this model, it is aimed to meet people's needs and raise their living standards, while trying to prevent excessive use of natural resources and environmental destruction. In addition, reducing social inequalities and providing fair opportunities to all members of society are also important factors. The Donut economic model aims to show that a more sustainable future is possible by providing guidance for policy makers and decision makers.



What is Donut Economy?

8 DECENT WORK AND ECONOMIC GROWTH



Sustainable Development Goal 8:

What Is Decent Work and Economic Growth?

Goal 8 aims to ensure sustainable global economic growth, productive employment and people's participation in the workforce. It also aims to reduce unemployment rates and increase job opportunities for disadvantaged groups, while supporting factors such as sustainable economic growth, high productivity, technological innovation and labor productivity.

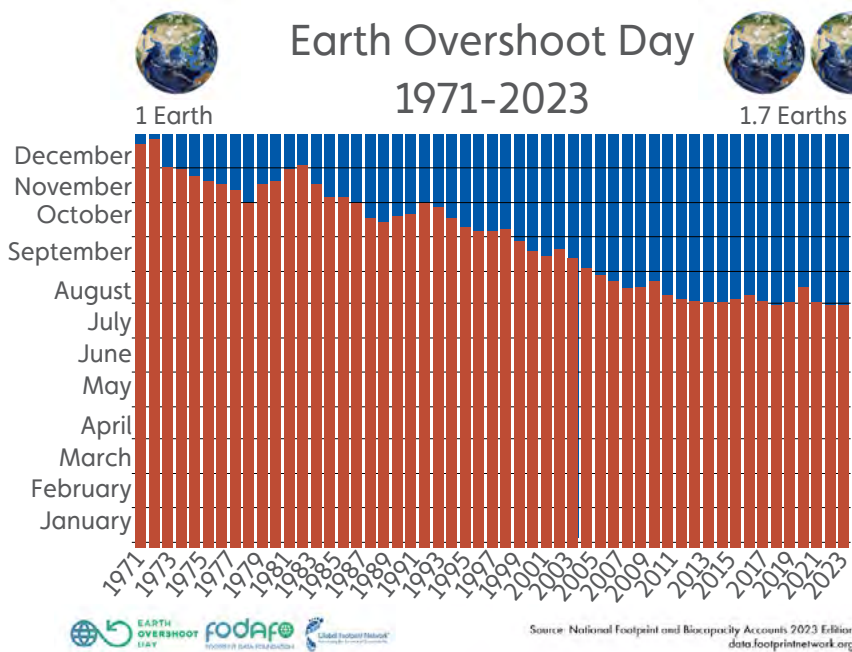
Sustainable economic growth aims to use resources efficiently, to reduce environmental impacts and to transfer resources to future generations by protecting them. This ensures that economic growth continues in the long run and prevents the negative effects of natural resource depletion or environmental problems.

This goal aims to promote fair and sustainable economic growth and employment, reduce income inequalities and provide decent working conditions.



Earth Overshoot Day

Global Overshoot Day is the day we consume a year's worth of natural resources the world offers us. The data of the Global Footprint Network, which conducts research evaluating the renewable resources in the world and the demand of people for these resources, showed that we have consumed the 1-year natural resources offered to us by our world as of June 22 this year in Türkiye. This date is one month ahead of the date in 2022. World Overshoot Day is set for on August 2, which means Türkiye consumed its resources 40 days before the world average.



As of June 22, 2023, we have come to the end of the natural resources allocated to us for 2023.

Starting today, we will start to consume more than the world's renewability capacity per year. After half a century of over consuming, we owe our planet 19 years of ecological resources. The most obvious consequences of this over consumption are deteriorating ecosystems, greenhouse gases accumulating in the atmosphere, and the climate crisis, which is making its impact more felt every day.



Humanity needs 1.7 planets to sustain its current lifestyle!

With minor changes, we can postpone the Overshoot date. According to the Global Footprint Network calculations, one of the most effective measures that can be taken is to reduce automobile use. If the carbon footprint caused by automobile usage is reduced by 50% and one third of this distance is covered by public transportation and the rest by walking or cycling, World Limit Overshoot Day can be postponed for 13 days. If food wastage is cut in half around the world, the Overshoot Day could be pushed further 13 days. If 350 million hectares of forest area is regained all over the world, we can postpone this date for 8 days.



If we can delay the World Overshoot Day by 6 days every year, we can reach the point where we can be content with the resources of a single planet before 2050. In order to comply with the IPCC (Intergovernmental Panel on Climate Change) scenario of limiting global warming to 1.5°C, we just need to move the limit exceeding date forward 10 days each year.

Global Overshoot Day reminds us that the rate at which humanity is consuming natural resources has reached an unsustainable point and poses a danger to future generations. By meeting this date with awareness, we need more work and action on sustainability and natural resource management. We must step up efforts to build a sustainable future for the conservation and efficient use of natural resources, collaborating among individuals, institutions and governments. Global Overshoot Day reminds us that we must live without pushing the limits of nature, and we must heed this call.



References

1. <https://www.ctvnews.ca/climate-and-environment/two-species-are-in-danger-of-local-extinction-as-wildfires-spread-across-canada-1.6435346>
2. <https://yesilgazete.org/ispanyadaki-orman-yanginlari-uc-haftadir-devam-ediyor/>
3. <http://www.surdurulebilirlikalkinma.gov.tr/wp-content/uploads/2021/02/SKA-ve-Gostergeleri-Kapak-Birlestirilmis.pdf>
4. <https://yesilgazete.org/suriyenin-copu-de-mersine-geliyor/>
5. { HOŞ GELDİNİZ } TMMOB Çevre Mühendisleri Odası (cmo.org.tr)
6. <https://yesilgazete.org/kaliforniya-sahillerinin-yuzde-70i-yuzyilin-sonuna-kadar-yok-olabilir/>
7. <https://www.euronews.com/green/2023/05/26/turtle-power-panama-gives-legal-rights-to-sea-turtles-protecting-against-pollution-and-poa#:~:text=Citizens%20can%20now%20be%20the,passage%20in%20a%20healthy%20environment.>
8. Quantifying the human cost of global warming | Nature Sustainability
9. <https://yesilgazete.org/kullandigimiz-tum-sekerlerde-mikroplastik-cikti/>
10. <https://yesilgazete.org/izmit-korfezindeki-her-10-baliktan-dordunde-mikroplastik-tespit-edildi/>
11. Satellites reveal widespread decline in global lake water storage | Science
12. <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf>
13. <https://www.cbd.int/gbo/gbo5/publication/gbo-5-en.pdf>
14. <https://bilimgenc.tubitak.gov.tr/makale/21-yuzyilin-cevre-sorunu-plastik-kirliligi>
15. <https://www.bbc.com/turkce/haberler-dunya-65822968>
16. <https://www.ekoik.com/kuresel-plastik-anlasmasinin-taslagi-2023e-kadar-hazirlanacak/>
17. <https://www.ekoik.com/2026daki-uefa-finali-cope-atik-gondermeyen-ilk-etkinlik-olacak/>
18. <https://sustainability.coldplay.com/>
19. <https://dergipark.org.tr/tr/pub/mufad/issue/64484/982425>
20. <https://pozitifomlet.com/etsiz-pazartesi-meatless-monday-akimi-nedir-nasil-ortaya-cikti/>
21. <https://sustainabilitymag.com/articles/women-underestimate-their-knowledge-of-sustainability>
22. Raworth, K. (2012). A Safe and Just Space for Humanity: Can we live within the doughnut?
23. <https://www.wwf.org.tr/?12540/Limit-Asim-Gunu>
24. Wolf, M. J., Emerson, J. W., Esty, D. C., de Sherbinin, A., Wendling, Z. A., et al. (2022). 2022 Environmental Performance Index. New Haven, CT: Yale Center for Environmental Law & Policy. epi.yale.edu
25. UPDATE: Canadian Wildfire 2023 Impact | Racine County Eye
26. Türkiye Limit Aşım Günü Geldi (eskisehir.edu.tr)
27. How Many CO₂ Emissions Does The Meat Industry Actually Produce? (plantbasednews.org)

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