

# Sustainability Newsletter



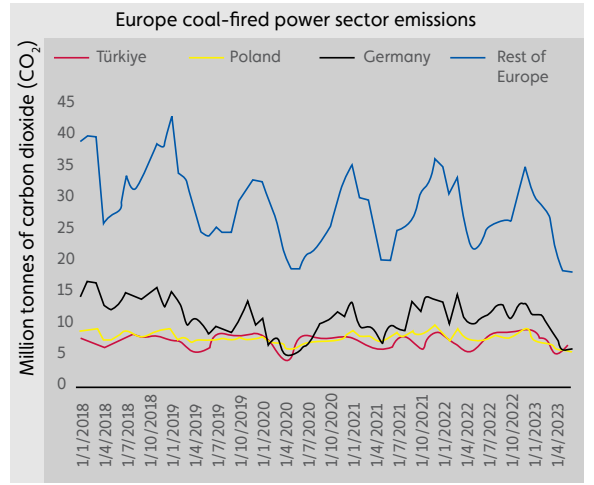
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# News from Türkiye and the World

## Türkiye Became the Source of Coal Pollution in Europe

As of June 2023, Türkiye has surpassed Germany and Poland in coal-fired electricity production, becoming the largest source of coal pollution in Europe. Türkiye's emissions reached a total of 44 million tons of CO<sub>2</sub>e in the first half of 2023. While coal usage has decreased in the rest of Europe, Türkiye increased its share in coal production to 36%.



## The Mediterranean Basin is Warming Faster Than the Global Average



In a study conducted by Dr. Tuğba Öztürk, the Chair of the Physics Department at Işık University's Faculty of Engineering and Natural Sciences, the increase in global temperatures and changes in extreme weather events over a 120-year period in Europe were examined. Temperatures in the Mediterranean Basin have been observed to increase 1.5 times more than the global average, with an estimated 3°C rise in the region versus the global average of 2°C.



# Climate Change Affects Biodiversity, Biodiversity Affects Climate Change

Climate change affects the genetic makeup, behaviors, and survival capabilities of living organisms. Therefore, many species are compelled to migrate in search of suitable habitats due to habitat degradation or loss, rising sea levels, increased temperatures, and food scarcity caused by climate change.

According to data provided by the International Union for the Conservation of Nature (IUCN), out of 150,388 species evaluated, approximately 42,108, or roughly 28%, are under threat of extinction. Based on the data shared by WWF Türkiye, 58% of sharks and rays among the 73 cartilaginous fish species living in the Mediterranean are in danger of extinction.

In addition, conserving biodiversity plays a critical role in combating climate change. Natural ecosystems play crucial roles in sequestering carbon and mitigating climate impacts. Therefore, the loss of biodiversity adversely affects the climate crisis.



## Competition for Projects Preparing Cities for Climate Change

World Resources Institute (WRI) organized the "WRI Ross Center Prize for Cities" competition for the 4th time to emphasize urban change and transformation. The theme for this year's competition has been set as "Advancing Climate-Ready Communities". Cities that are prepared for the climate crisis and actively enhancing the scope and scale of their preparedness, while being aware of the severity of the climate crisis, will participate in the project. The projects will include climate-resilient infrastructure, zero-carbon buildings, and disaster preparedness initiatives. In 2019, Eskişehir Metropolitan Municipality was among the finalists with its urban development project.

# The World Needs 200,000 Offshore Wind

## Turbines by 2050

According to a study conducted by the University of Southampton, approximately 200,000 offshore wind turbines will be required worldwide to achieve the net-zero emissions target by 2050. By the end of 2022, the global installed offshore wind capacity was 63 GW, which is 32 times the current capacity. The study suggests that around 200,000 offshore turbines generating 2000 GW in the coming years will be necessary to meet the net-zero emissions target, equivalent to an area of about 500,000 km<sup>2</sup> in the ocean.

# The Color of the Oceans Is Changing

Studies based on the analysis of the MODIS-Aqua satellite's imagery over the last 20 years revealed that more than 56% of the world's oceans have shifted their color from blue to green. Climate change has affected the populations of phytoplankton and algae, leading to a change in the color of the oceans.

Generally, in the last 20 years, oceans located approximately 23.5 degrees north and south of the equator have displayed a greener appearance. This color, indicating plankton and algae blooms, is a sign of pollution and oxygen depletion, posing a threat to marine life.





# COP28

## Climate Action Plan Established

The President of COP28 (the 28th Conference of Parties to the United Nations Framework Convention on Climate Change) Sultan bin Ahmed Al Jaber announced the action plan devised for the summit, scheduled to take place in Dubai from November 30 to December 12, 2023. This action plan is built upon four key elements: accelerating green transition, developing climate finance mechanisms, focusing on adaptation efforts, and inclusivity.

Within this framework, the goal is to increase global renewable energy capacity threefold by 2030, reaching 11,000 GW, and to double hydrogen production to an annual volume of 18 million tons. Additionally, the gradual reduction of fossil fuels and the phased-out support for fossil fuels will also be among the topics discussed.

## Africa Proposes Global Carbon Taxes to Combat Climate Change

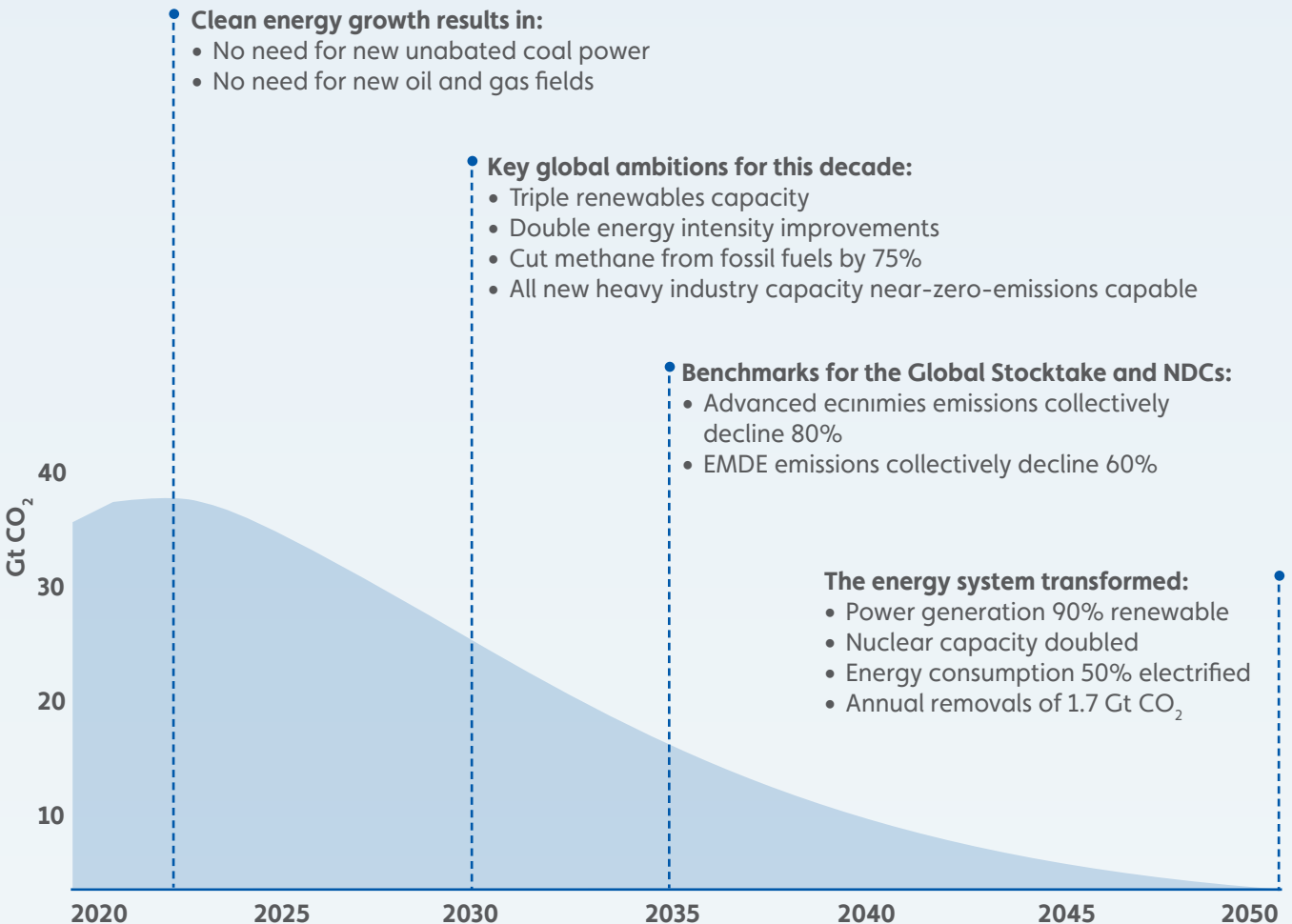
During the September African Climate Summit, African heads of state urged major polluting countries worldwide to act in providing aid and allocating resources to poorer nations. Africa is considered one of the most vulnerable continents to the impacts of climate change, and according to researchers, only has access to about 12% of the required 300 billion dollars needed to cope with these effects.



# Net Zero Roadmap Report Released

International Energy Agency (IEA) published the **Net Zero Roadmap Report** in September. The report, which is considered crucial in achieving climate goals, indicates that along with the growth in clean energy investments, there will be a decline in fossil fuels. According to the latest version of the Net Zero Roadmap, the goals of reducing greenhouse gas emissions from the global energy sector to net zero and limiting global warming to 1.5°C are within reach due to significant advancements in clean energy technologies. However, in order to achieve these goals, rapidly increasing investments need to be continued across multiple sectors.

## A roadmap to net zero by 2050





# Science Based Targets (SBT)



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science-Based Targets (SBTs) are specific targets set by companies to reduce their greenhouse gas emissions in line with science-based climate change objectives. These targets are considered “science-based” as they are based on climate science and are aligned with the goals of limiting global warming set out in the Paris Agreement and in the reports of the Intergovernmental Panel on Climate Change (IPCC).

The process of setting science-based targets requires a meticulous approach to ensure that a company’s emission reduction goals align optimally with the most current scientific research. SBTs assist companies in clearly articulating their efforts to combat climate change and in definitively outlining commitments to reducing their carbon footprints.

For a target to be recognized as science-based, it should encompass at least 95% of Scope 1 and 2 emissions. Moreover, if Scope 3 emissions account for more than 40% of a company’s total greenhouse gas profile, targets are expected to be established for these emissions as well.



# SBTi

## (Science Based-Targets Initiative)

SBTi, established in 2015, is a collaborative effort formed between CDP, UN Global Compact, WRI, and WWF. This initiative aims to assist companies in setting environment-friendly objectives and achieving them in a science-based manner. Joining the SBTi involves companies validating emission targets in accordance with the latest research on climate change, thereby ensuring that companies take responsibility, particularly in limiting global warming to 1.5°C.



To limit the adverse effects of global warming, there is a need for a worldwide reduction of greenhouse gas emissions by half by 2030 and achieving net-zero emissions by 2050.

### Setting a Science-Based Target:

Steps	Process	Key Considerations
Commitment	The commitment letter process begins with registration in the system via the SBTi submission form. Once the document is signed, a signed copy is returned to the SBTi. Upon approval, the company will be recognized on the SBTi website as having made a commitment.	Companies are given a 24-month period to have their targets validated by the SBTi. Failure to submit and have their targets validated within this specified period will result in the withdrawal of their commitment.
Develop A Target	1. Determining the Scope	Companies can choose Scope 1, 2, and 3 targets separately. It is important to consider the company's projected growth when choosing a Scope 3 basis.
	2. Development of Emission Calculation Methodology	It is crucial to have the most appropriate baseline year and accurate emission data available.
	3. Target Methodology Selection	Each target method has different requirements concerning reduction and timeline for progress.
Submission	Once all required documents have been submitted, companies should schedule a validation date.	-
Communication	Targets are published one month after approval. Companies should carry out announcements regarding the targets.	-
Validation	Companies are given 5-10 years to achieve short-term targets.	Within 5 years or earlier, companies must revalidate their targets. After target approval, re-approval for targets is required following any merger and acquisition activity carried out by the company.
Disclosure	Companies must disclose their emissions at least annually.	The progress towards the target should be disclosed.

# Carbon Border Adjustment Mechanism Pilot Implementation Started

One of the fundamental tools for achieving the greenhouse gas emission reduction targets set by the European Green Deal is the Carbon Border Adjustment Mechanism (CBAM). The CBAM aims to preserve Europe's competitiveness against the costs generated by the green transition on one hand, while increasing global efforts to combat climate change on the other hand.

The transition period of the CBAM Regulation began on October 1, 2023, and will continue until the end of 2025. It covers sectors such as iron, steel, cement, aluminum, fertilizers, electricity, hydrogen, as well as iron or steel sectors such as screws and bolts. During the transition period, EU importers will not incur any financial obligations; instead, they will report embedded emissions in imported products subject to the CBAM mechanism. The rules and requirements for reporting emissions will be detailed by the European Commission through implementing acts.

Currently, these products are limited to cement, iron and steel, aluminum, fertilizers, and electricity. According to the European Commission, these are product groups carrying a high risk of carbon leakage. However, with the latest regulation, hydrogen is also added to product groups at high risk of carbon leakage.

Considering the country's significant export volume to the European market, the CBAM becomes a crucial topic for Türkiye. The pilot scheme, which will start this year, will be fully enforced in 2026. The pilot Carbon Border Adjustment Mechanism (CBAM) scheme, which started on October 1, 2023, is anticipated to potentially adversely affect the competitive power of companies exporting to Europe by exposing them to new tax risks.



# Eco-anxiety

Recently, environmental issues such as extreme weather events, drought, and rapidly declining biodiversity have compelled us to confront the alarming reality of climate change. Especially prevalent occurrences like forest fires and the breaking of historical temperature records consistently serve as reminders of these environmental threats in people's minds.

Moreover, heightened concerns about what the future holds have led to the emergence of a previously unprecedented type of distress called "eco-anxiety." Experts warn that surpassing this threshold of concern could lead to psychological disorders.

Concerns about climate change have a greater impact on certain communities. Specifically, among the elderly, children, and women during pregnancy or the postpartum period, symptoms of ecological distress are more commonly observed. Furthermore, disparities in access to infrastructure and healthcare resources due to societal and economic inequalities are believed to increase the likelihood of psychiatric and psychological symptoms among populations such as minorities, immigrants, and refugees.

According to a study conducted in Canada, 78% of young people aged between 16 and 25 believe that climate change affects their overall mental well-being, with 56% expressing feelings of fear and helplessness in response to this situation. Eco-anxiety could potentially be a consequence of the financial strain caused by climate change. When individuals face the prospect of losing their livelihoods, they may experience profound distress.

Scientists suggest that spending more time in nature could alleviate such anxieties. Witnessing natural beauty and being in the presence of living creatures not only has the potential to reduce ecological concerns but also positively impact mental health.





# Gender Equality 2023 Report

**[“Gender Equality 2023 Status Report,”](#)** emphasizes the inevitability of swift and resolute action to achieve gender equality. The report addresses progress in gender equality under Sustainable Development Goal 17 and was jointly presented to the public by UN Women and the UN Department of Economic and Social Affairs (UN DESA) on September 7, 2023. It calls for fulfilling the commitments of the 2030 Agenda for Sustainable Development and ensuring that no woman or girl is left behind.



For the first time this year, the published report includes the impacts of climate change on women and girls. The report highlights a significant threat that the climate crisis could push 158 million women and girls worldwide into poverty. Additionally, it draws attention to the elderly population. Data presented in the report indicates that elderly women experience higher rates of poverty and violence compared to elderly men.

Furthermore, the report emphasizes that there has been no change in the proportion of women in leadership positions. In parliamentary settings, the representation of women stands at 26.7%, whereas in local governments, it is at 35.5%. In the business world, only 28.2% of top-level positions are held by women leaders. These figures underscore the existing inequalities in gender equality and emphasize the necessity for greater representation of women in leadership positions.

At the current pace, it is estimated that by 2030, more than 340 million women and girls, constituting 8% of the world's population, could be forced to live in extreme poverty. The report emphasizes the urgent need for concrete actions to achieve gender equality and empower women by 2030, highlighting the necessity of an additional \$360 billion annually to accomplish this goal.

**Other highlighted data in the report includes:**

- No country worldwide has completely eradicated intimate partner violence.
- At the current rate, an estimated 110 million girls and young women will be deprived of education by 2030.
- There remains a significant workforce and income disparity between women and men. Globally, for every \$1 earned by men, women earn only 51 cents.
- Only 27 countries allocate budgets to promote gender equality and women's empowerment, indicating a need for increased efforts in this regard.





The Zero Waste Project, initiated in 2017 under the auspices of the Ministry of Environment, Urbanization, and Climate Change, aims to reduce waste generation, encourage efficient use of resources, and increase recycling rates. It presents an effective solution to the massive daily solid waste issue faced by major cities, particularly metropolises like Istanbul. For instance, approximately 19,500 tons of solid waste are generated daily in Istanbul alone. While the rate of recycled waste nationwide was only around 12% in 2018, by 2022, this rate had escalated to 27.2%. Enhancing these recycling rates will require collaboration across all sectors of society. The Zero Waste approach not only focuses on waste reduction and increasing recycling but also plays a significant role in fostering societal awareness and promoting sustainable consumption habits.

Moreover, it is beneficial from an economic standpoint. Recycling and waste reduction practices not only create new employment opportunities but also contribute to the conservation of natural resources by reducing raw material consumption. Therefore, the Zero Waste approach maintains its significance as a comprehensive strategy supporting both environmental and economic sustainability.

As part of the Zero Waste approach, the use of a color scale in collection equipment and promotional materials holds significant importance. Colors wield a strong influence on human perception, thus establishing a standardized color scale in waste management enhances the efficiency of waste segregation and recycling processes.





# BIST Sustainability Index


The BIST Sustainability Index, initiated by Borsa İstanbul, is an initiative aimed at assessing the risks related to environmental, social, and corporate governance issues, and monitoring companies' sustainability performance. Actively calculated since November 4, 2014, this index encourages companies traded on Borsa İstanbul to transparently and measurably present their sustainability practices.

The BIST Sustainability Index is designed to identify companies committed to sustainability and corporate social responsibility principles, making it easier for investors to invest in these companies. It encourages companies to demonstrate their sustainability commitments and incentivizes them to provide this information to investors, regulators, and other relevant stakeholders. This collaboration fosters sustainability-focused investments and assists companies in measuring their sustainability performance.

## Companies must adhere to the following criteria to participate in the index:

- **Combined ESG Score:** Companies should have a combined ESG score of 50 or higher. This is based on a criterion that evaluates companies' sustainability commitments and practices.
- **Pillar Scores:** Each pillar score (Environment, Social, Governance) should be 40 or above. This indicates that the fundamental elements of companies' sustainability strategies are robust.
- **Category Scores:** At least 8 of the companies' category scores should be 26 or higher. This indicates that companies perform well in various areas related to sustainability.
- **Refinitiv and Data Source:** Refinitiv provides financial market data, trading platforms, analytics, and related financial services. These services are utilized by banks, investment firms, companies, and other financial institutions.



REFINITIV 

Borsa İstanbul collaborates with Refinitiv Information Limited ("Refinitiv") to identify companies to be included in the index based on the 2021 evaluations. Refinitiv's sustainability assessment results rely solely on "publicly available" data, and Borsa İstanbul covers the cost of these assessments. This collaboration ensures greater access to transparent and reliable information about companies' sustainability performance.

# BIST Sustainability

# 25 Index

BIST Sustainability 25 Index has been launched on 21 November 2022. The purpose of creating this index was to list companies with high sustainability performance as well as high market capitalization and market value.

**In order to be included in the BIST Sustainability 25 Index, companies are expected to meet the following criteria:**

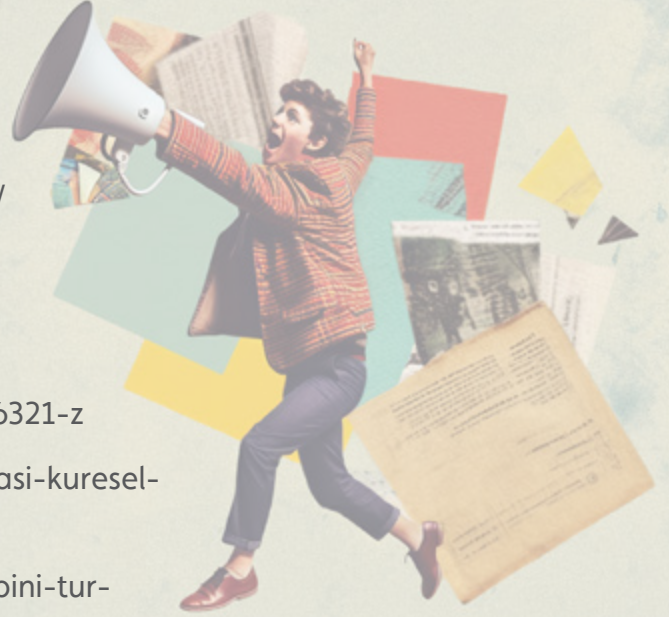
- **Combined ESG Score:** Companies should have a combined ESG score of 70 or higher. This reflects companies' commitments and practices regarding sustainability.
- **Pillar Scores:** Each pillar score (Environment, Social, Governance) should be 60 or higher. This indicates that the fundamental elements of companies' sustainability strategies are robust
- **Category Scores:** At least 8 of the companies' category scores should be 50 or higher. This indicates strong performance across a broad spectrum of sustainability.

The 25 companies that meet these criteria, with the highest Trading Volume and Market Value, are considered eligible for the BIST Sustainability 25 Index. This provides investors with the opportunity to invest in companies that exhibit high sustainability standards, market capitalization, and value.





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**For feedback and suggestions:  
[surdurulebilirlik@teknosa.com](mailto:surdurulebilirlik@teknosa.com)**