ECOSYSTEM REVIEW

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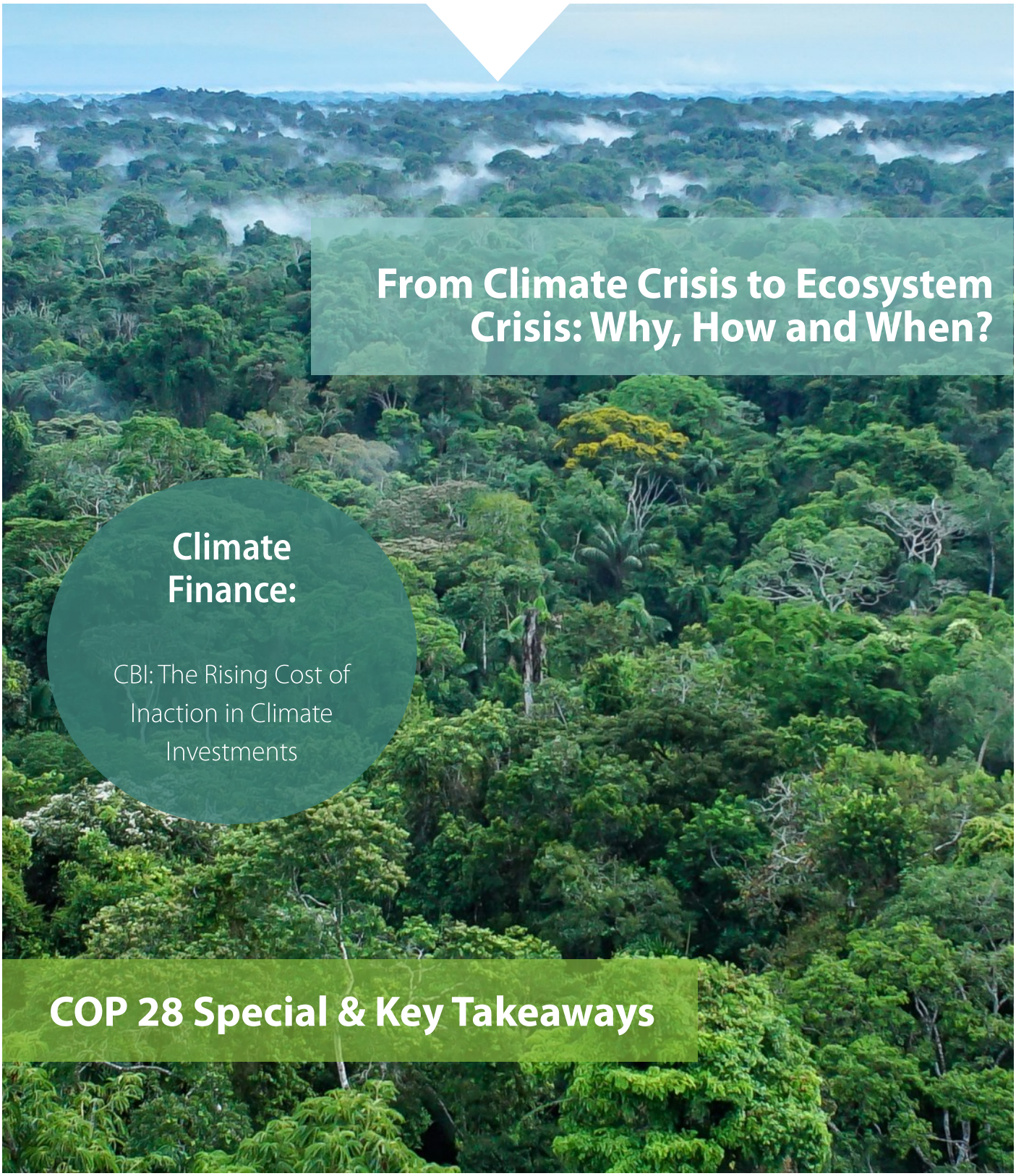

From Climate Crisis to Ecosystem Crisis: Why, How and When?

Climate Finance:

CBI: The Rising Cost of Inaction in Climate Investments

COP 28 Special & Key Takeaways

The content of Climate Review was written by Onur Bülbül, PhD.
under the supervision of TSKB Economic Research

About TSKB Advisory Services

While TSKB supports Turkish private sector investments with its thematic loans and innovative financing products, we continue to create added value for the business world and all of the drivers of development with our sector specific advisory services which we have been offering for 35 years. With our advisory teams consisting of financial advisors, engineers and economists, we guide the companies operating in the sectors driving the Turkish economy in its journey of transformation, development and sustainability. TSKB supports businesses to assess the risks and opportunities with data-based methods associated with environmental, social and governance (ESG) policy and to analyse the public and political expectations.

Challenge Accepted

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Upcoming Events

The Climate and Clean Air Conference will be held in Nairobi between 21-23 February.

The Energy Transition Summit organized by Economist Impact will take place in London on March 4.

Welcome to the 13th issue of our Climate Review!

Oops! I must correct myself, since my usual opening sentence I have been in each and every one of the last 12 issues is no longer valid. I have to change it, and I am delighted to do so. Let me try again then:

I proudly present our 13th issue with its new name - the Ecosystem Review!

In this issue we will share the reasons behind this change, which we believe is not only highly important, but also very meaningful and timely.

Time flies, our understanding improves, one lives, one learns. As we learn, we do not hesitate to broaden our coverage embracing the new terms which emerge with the uncharted waters of research. We happily accept the challenge and look forward to sharing our learning curve.

There is also remarkable timing involved. Our entire Economic Research Department followed the COP 28 agenda very carefully, with two of our colleagues attending the conference in Dubai. Hence, we will also set out our reasons behind switching from the "Climate Review" to the "Ecosystem Review" within the context of COP 28 discussions.

Until 2007, much of the talk revolved around "global warming". Since then, we have seen "climate change" replace the term "global warming" within titles. Recently and quite rightly, however, the spotlight has also turned to biodiversity. Yet our pale blue dot has more problems to mention, requiring a rather more holistic approach. Noting that we are struggling with more problems than we have admitted, but less time than we would have have liked, we expand our coverage for a better roadmap. Fearing that "sustainability" might fall short of what is required, we now talk of "regenerative practices". Knowing that the "climate crisis" is not the only problem we face, we push for a better understanding of "nature" and note down the "ecosystem crisis". We are not satisfied with boiling down the whole story into "risks"; we also think the time has come to seek out "opportunities".

As you see, we have more than one good reason to change the title of our journal, and the agenda of the COP 28 once again confirmed this to us. In the run up to COP 29, we expect many stakeholders to leave behind the habit of aggregating different topics under broad titles. Achieving success in the green transformation requires us to be more precise and focused - another challenge for research economists such as ourselves.

To which we say, "Challenge accepted!" and present our "Ecosystem Review". In this issue we are not only announcing our new name but also declaring our commitment to a broader and more detailed research approach, urging active economic policies focused on regenerative practices to tackle the ecosystem crisis in a manner consistent with price stability and financial stability.

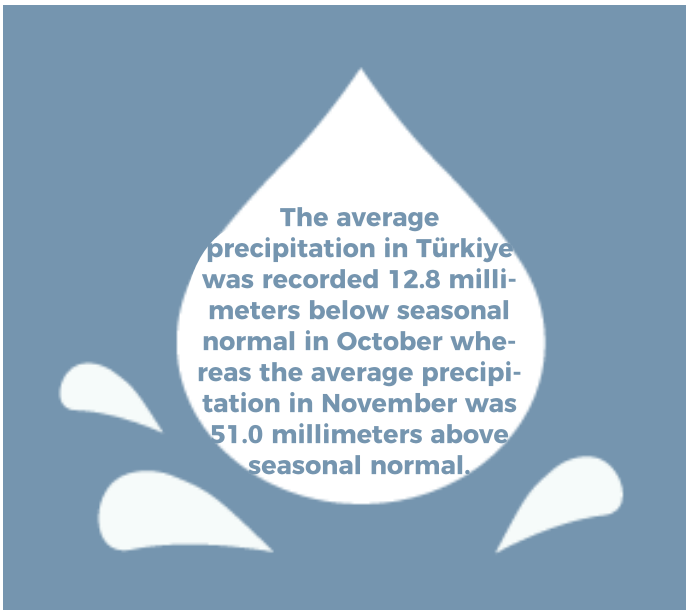
Join us and spread the news!

Ecosystem Crisis: Why?

Now that the world is feeling the impacts of the climate crisis, including its implications on economic and social development, the time might have come to ask whether we are correctly addressing the root cause of this crisis. Is this a mere "climate crisis" or are we witnessing something larger, climate being just a part of it? Are our land use practices, which are resulting in deforestation and land degradation, and our addiction to plastic, which is choking marine ecosystems, outcomes of climate change? If not, how would we label what is going on? Would it be more correct, therefore, to define it as an "ecosystem crisis"? Are we crossing some planetary boundaries beyond climate? Are we about to cross some tipping points that may result in the collapse of our planet's interconnected systems, such as land systems, oceans, freshwater, and endangered species as well as climate? What are the environmental, economic, and social repercussions of this change that we need to address to prosper on a healthy planet?

Ecosystems are the backbones of the interconnected dynamics of our living planet. The term refers to a complex and symbiotic relationship between living organisms and their physical environment such as water, weather, and landscape. Ecosystems are defined in a unit of space such as marine, aquatic, or terrestrial that vary by size. They can be found in vast places such as oceans or in places as tiny as a water droplet. Their common feature is the delicate balance within and among its building blocks that makes life, as we know it, sustainable. Healthy and resilient ecosystems also regulate climate by acting as carbon sinks as well as regulating precipitation and temperature patterns, which accordingly renders climate regulation an ecosystem service.

Alas, it is us, the human species, interfering with the healthy functioning of ecosystems, especially after since the industrial revolution which arguably broke our link with nature, leading us to even forget that we are a part of it. This includes our overall relationship with nature beyond increasing carbon emissions causing global warming and climate change. It is, in fact, surprising to note that despite being present on this planet for only the last 1.5 seconds of its life - if our planet's 4.5 billion year history is compressed to a 24 hour period - we are staring down the abyss of the sixth mass extinction as argued by the World Wildlife Fund (WWF), a result of our own disruption of ecosystems.



So, it is fair to argue that we, as humans, may be the most invasive species that the world has ever seen. Hence, it is incumbent upon us to correct our relationship with nature and our planet, and this starts with acknowledging that we are witnessing a complex and interconnected crisis of ecosystems going beyond a single domain of climate and acting accordingly to see the world as one interconnected ecosystem. This is why we have decided to label what we are going through as an "ecosystem crisis" that includes climate as well. How we should respond, though, is another question.

The Need to Avoiding Nature-Negative Financing

The latest State of Finance for Nature report prepared by the United Nations Environment Programme (UNEP) and released during the COP 28 states that activities which have direct negative impacts on nature such as those associated with deforestation, the destruction of wetlands and other natural habitats attract annual investments of almost USD 7 trillion from both public and private sector funds. Nature based Solutions (NbS) that promote a stable climate on one hand and the health of the land and nature on the other are significantly underfunded, attracting just USD 200 billion of investments in 2022.

Construction, electric utilities, real estate, oil and gas and food and tobacco were the top five industries attracting the bulk of the nature-negative financial flows. The report found that environmentally harmful subsidies in agriculture, fossil fuels, fisheries and forestry amounted to USD 1.7 trillion in 2022, pointing to public finance flows ten times higher than those allocated for NbS.

The report also revealed that meeting the target set out in the Rio Convention to limit global warming to 1.5°C and the Global Biodiversity Framework target, to leave at least 30% of land and sea untouched for the sake of achieving land degradation neutrality by 2030 would require a near-tripling in annual finance flows to NbS, from their current level of USD 200 billion to USD 542 billion by 2030, and to USD 737 billion by 2050.

The report stresses that efforts to restore and strengthen the resilience of nature, such that it can continue to deliver critical ecosystem services, requires investments that will foster positive outcomes for nature. Such an endeavor not only requires a massive ramping up of NbS investments but also necessitates the redirecting of finance to avoid any nature-negative implications.

COP 28 Special

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The 28th Conference of the Parties (COP) was organized within the scope of the United Nations (UN) Framework Convention on Climate Change and held in Dubai. This year, we observed two major changes in the meetings beyond the formal negotiations. We have set out our views in our study, "Traces of a Structural Change from Marrakech to Dubai: What Happened at the COP 28 Beyond Official Negotiations?" Herein we include a brief summary.

A restructuring of Multilateral Development Banks (MDBs) has long been considered desirable in the process of closing the climate finance gap. At TSKB Economic Research, we have monitored the calls for reform and progress in this area, and reported the steps taken in our publications. These calls began to materialize during the annual meetings held by the IMF and World Bank in Marrakech in October. The World Bank (WB) set out a tangible change in perspective regarding the direction it would take in the coming period under the leadership of its new president, Mr. Ajay Banga. We can discuss this change under two headings: **a model change in development finance and an expansion of focus.**

COP 28 became a medium where the model change in development finance became more evident. The announcement by the United Arab Emirates that it had established a USD 30 billion investment fund is a notable example of the inclusion of capital market instruments into the development finance architecture. The joint statement published by ten Multilateral Development Banks around the world within the scope of the COP 28 included a pledge that funding would be supported through "national platforms", displaying an approach which completes this picture.

Despite all the criticism, the Voluntary Carbon Credit markets could also emerge as an important player in the changing architecture of development finance. Examples in this field include the Energy Transition Accelerator, an indicator that the US shares its current status of, and the carbon credits that the WB plans to issue to 15 countries in return for protecting forests. These efforts are expected to increase the functionality of carbon credit markets and serve to fund the green transformation processes of developing countries through capital market investors.

There were also noteworthy developments related to the expansion in the focus of development finance at the COP 28. In October, the WB redefined its vision and mission at its meeting in Marrakesh, and added the phrase of "a liveable planet" to its perspective. However, establishing a 'liveable planet' introduces an understanding that goes beyond the need for mitigation and adaptation within the scope of the climate crisis. On the other hand, it also sheds light on the limits of the approach to the climate crisis.

The discussions in the sessions at the COP 28 also highlighted the limits of the climate-focused approach. The conceptual framework is currently being discussed, produced and developed. We also observed that the concepts of the ecosystem, nature, biodiversity, pollution and planetary boundaries are used transitively with one other. Over time, the sub-definitions in this concept set will become clearer.

While the European Bank of Reconstruction and Development (EBRD) has announced an approach document on the transition to a "nature-positive" economy, the MDBs published a common principles document on the monitoring methodology of "nature-positive" financing. It appears that this change in purpose is only the first step and will lead to a structural break in the focus of development finance. It could now be claimed that the focus should be on financing the green economy rather than the financing of green projects, and an emphasis should be on the essence of the issue.

As a result, the COP 28 stands out with the double breakthrough in development financing. It indicates that we will go beyond credit-based funding with comprehensive efforts to close the funding gap in the investments required by the ecosystem crisis by transferring resources from capital markets. In other words, the focus of funding is expanding. The inadequacy of the conceptualization of the climate crisis has been underlined and an understanding focused on repairing our planet is developing, which takes into account of the emphasis on "nature positive".

Key Takeaways of the COP 28 Negotiations

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We followed the COP 28, which took place in Dubai between November 30 and December 12. The COP 28, which started with lively debate on the first day, was considered to be a successful COP in some aspects, but an unsuccessful one in others.

One of the most important results of the COP 28 was the publication of the Global Stocktake, which records the progress of the steps taken towards achieving the goals set out in the Paris Agreement every five years. While the Stocktake acknowledged overall progress in mitigation, adaptation, and implementation and support, it noted that these advances fell short of achieving the Paris Agreement targets.

One of the most important results was the issue of "fossil fuel" which was included in the text for the first time as "transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the science". There were also a number of other noteworthy pledges in the conclusion text:

- Tripling renewable energy capacity globally and doubling the average annual rate of improvement in energy efficiency by 2030,
- Accelerating efforts to phase down unabated coal-fired power plants,
- Accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production,
- Phasing out, as soon as possible, inefficient fossil fuel subsidies that do not address energy poverty or a just transitions.

The establishment of the Loss and Damage Fund was also one of the important steps taken at the COP 28. With the contributions received since its first day, a total of around USD 800 million has been donated to the loss and damage fund. However, this figure falls a long way short of meeting the financing needs of vulnerable countries for adaptation.

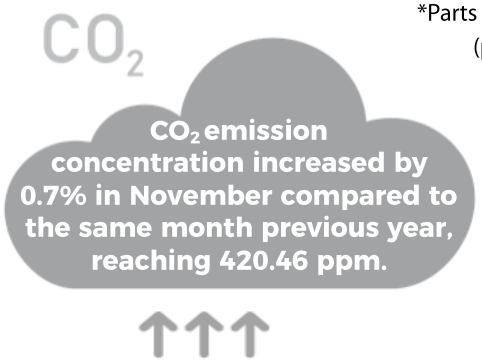
Declarations were signed on the theme days, some of the most important being the agriculture, food and climate declaration, the climate and health declaration and the hydrogen declaration.

The declaration on agriculture, food and climate was signed by 159 countries. The declaration underlines the urgent need for agriculture and food systems to transform and adapt to the challenges presented by climate change.

The climate and health declaration, signed by more than 140 countries, aims to increase intersectoral cooperation to reduce emissions in the health sector. While the declaration highlights the need to establish systems that will address the effects of the climate crisis on health, it also aims to carry out joint efforts to seek solutions to the problems caused by air pollution.

The hydrogen declaration was signed by 37 countries. The aim of the declaration is to launch a certification program to create a global market in renewable and low-carbon hydrogen production. The declaration aims to pave the way for collaborations to use hydrogen potential worldwide.

We leave behind another interesting COP with its final text and signed declarations. Let's hope for more progress at the COP 29, to be held in Baku...



*Parts per million (ppm)

Ecosystem Crisis: How?

Ecosystems are built on a delicate balance of networks extending between different species, and we as humans are part of them. Our actions both impact and are impacted by the functioning of ecosystems. Nevertheless, our accelerated use of ecological resources through our current production and consumption patterns has resulted in us consuming 70% more ecological resources than the ecosystems can renew annually. Clearly, then, our way of life is unsustainable. Hence, we have a massive burden of responsibility to not only turn to sustainable living conditions but also to take action to pave the way for the recovery of nature.

This means going beyond our current efforts to adapt to and mitigate the worst impacts of the climate crisis by revolutionizing our supply chains, energy systems, communications networks, transport systems and more. This means becoming nature positive, acknowledging that our actions impact beyond climate to include overall ecosystems that we have already damaged and continue to degrade, while working to restore and give back to nature.

Nature positive solutions refer to efforts to implement the green transformation in a way that is mindful of its unintended consequences on nature. Solar or wind energy, for instance, may offer good opportunities to cut our emissions but how much do consider the impact of solar farms on the biodiversity of the land they are established on, or the impacts of offshore wind farms on marine ecosystems? Would it not be more ecologically sound to install solar panels above open car parks in cities, for example? As we rush to electrify our transport systems, demand for rare minerals to manufacture the required batteries has surged, resulting in these rare minerals becoming even scarcer. One promising solution which has emerged is deep-sea mining where many of those minerals can be found in rocks which have been lying on the seabed thousands of meters below sea level for millions of years, and luckily we have the technology to extract them. However, how aware are we of the risk of damaging the barely studied ecosystems under water and their implications on other ecosystems?

Such examples can easily be multiplied. Our relationship with land, water, other species and even outer space - where an increasingly congested orbit around our planet carries the risk of satellite collision potentially leading us to lose our eyes above us - needs to be revolutionized. That revolution lies in us implementing nature positive solutions, as the term “climate neutrality” becomes outdated and falls short of solving the ecosystem crisis we are facing.

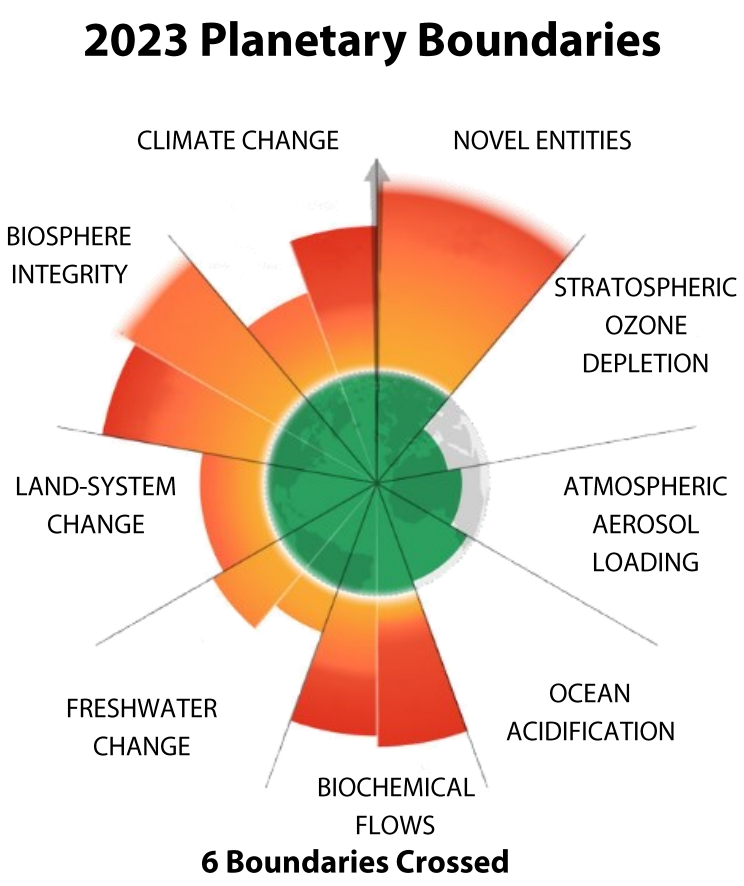
Determining how we should react to this existential threat starts with better understanding our relationship with nature, labeling the crisis we are going through correctly and implementing policies that transform the solutions we utilize. It is time to realize that we are facing an ecosystem crisis which requires us to be nature positive by rethinking our investment decisions, changing our production and consumption patterns, and regulating development policy in favor of nature.

Ecosystem Crisis: When?

Our planet has gone through many transformative changes throughout its history, including five mass extinction events in the last 450 million years. We are now living through the period of the "Great Acceleration" where human activity has been the main cause of changing ecosystems at an unprecedented pace. In fact, three quarters of the carbon dioxide accumulated in the atmosphere due to human activity has occurred since 1950s, during which time the global population has tripled.

As we have populated our planet, all systems that support our life from food production and energy consumption to land and water use, transportation - in short, everything that has led to urbanization and industrialization - has left its mark on the Earth's systems. Studies show that as of 2023, six out of the nine systems regulating the stability and resilience of the Earth's system have already exceeded their limits, increasing the risk of irreversible environmental damage. Labeled as planetary boundaries, these nine processes comprise the complex biophysical Earth system, which also cautions that a single focus on climate change is not adequate for overall sustainability.

The six planetary boundaries found to have been crossed are climate change, the biosphere integrity, the land system change, freshwater change, biochemical flows and novel entities that refer to all new chemical compounds that did not exist before the emergence of human civilization such as microplastics, pesticides and nuclear waste. The other three boundaries of stratospheric ozone depletion, atmospheric aerosol loading and ocean acidification are found to be within their limits to support overall sustainability – though some are dangerously close to exceeding their safe operating space.



Source: Stockholm Resilience Center, TSKB Economic Research

When viewed in this stark light, it becomes clear that there is a need to alter our economic policy choices in dealing with the ecosystem crisis we are in. Merely in terms of climate for instance, the practice of pricing one unit of carbon at a comparable rate may need to be revised to incorporate the negative impacts that amount of carbon may have not only global warming but also the wider dynamics of our planet. In addition, viewing this crisis as something which goes beyond the domain of climate to include a larger ecosystems dimension requires supporting the green transition without sacrificing nature. Hence, our perspective of sustainability will need to change in the near term.

We are a part of ecosystems, and our actions impact their functioning. We have a gargantuan responsibility to ensure that the earth continues to be a livable planet. Knowing that it has gone through five mass extinctions and still lives on illustrates the point that it is in fact not the planet that is slowly dying, it is us! Now is the time to act!

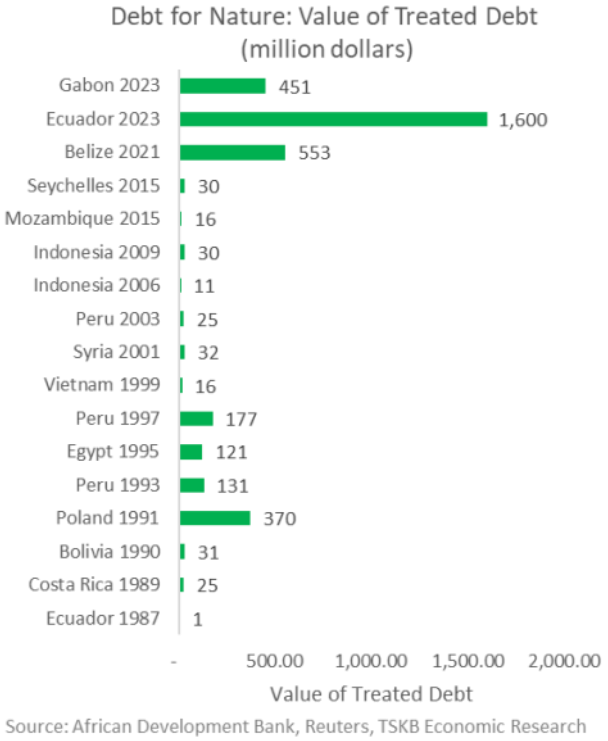
What Are Debt for Nature Swaps?

Besides the much-needed language on fossil fuels as well as the loss and damage instrument, which can be considered among the successes of the latest COP in Dubai, climate financing also witnessed a transformation towards a domain beyond climate to embrace nature. A move to transform climate financing to protect natural resources, which gained pace with the Summit for a New Global Financing Pact in Paris this past June, resulted in a "debt-for-nature" task force among several multilateral development banks (MDBs) and climate funds, was announced at the COP 28.

Debt for nature swaps have been used since late 1980s and there are currently around 150 deals in place. The financial instrument cuts a developing country's debt to enhance actions for the protection of ecosystems. Simply put, debt for nature restructures the debts of developing countries with longer maturities and more favorable interest rates, allowing investments to be undertaken in areas which can create sustainable economic benefit by protecting the natural environment.

The market for these types of debt swaps has the potential to expand to around USD 800 billion – or a third of the USD 2.2 trillion in global emerging market sovereign debt. Since Ecuador's USD 1 million debt for nature swap in 1987, the market has undergone exponential growth with the USD 552.9 million swap for Belize in 2021 as well as the USD 1.6 billion for Ecuador and USD 450.5 million for Gabon in 2023.

The task force - currently led by the Inter-American Development Bank and the U.S. International Development Finance Corporation, is expected to expand to include the Asian Development Bank, the African Development Bank, the Agence Française de Développement of France, the European Investment Bank, the Green Climate Fund and the Global Environment Facility and is expected to start work in January.



Source: African Development Bank, Reuters, TSKB Economic Research

The Accelerating Transformation in the Transport Sector

The International Energy Agency's (IEA) annual Global Electric Vehicle (EV) Outlook report referred to the exponential growth in electric car markets, with more than 10 million electric cars sold in 2022. This trend is expected to continue with 14 million EVs in 2023, a 35% YoY increase. The share of electric cars in overall car sales rose to 14% in 2022, from less than 5% in 2020 and 9% in 2021. China is the leading EV market, being home to more than half of the world's electric cars, followed by Europe and the US, where there was a 55% increase in sales of electric cars in YoY terms. The Inflation Reduction Act (IRA), which provides substantial subsidies of up to USD 7,500 per electric car appears to have to have paid dividends in the transformation of the transport sector in the US, which is responsible for the bulk of the country's emissions.

However, EV subsidies accounted for only 10% of global spending on electric cars, exceeding USD 425 billion in 2022 – 50% more than the amount in 2021. Hence, the electrification of road transportation is mostly being supported by consumers. This transformation has important implications not only on carbon emissions but also for the important task of "transitioning away" from fossil fuels, as agreed at the COP 28. The IEA predicts that the expanding EV market will cut global oil demand by 5 million barrels per day as early as 2030.

Climate Finance

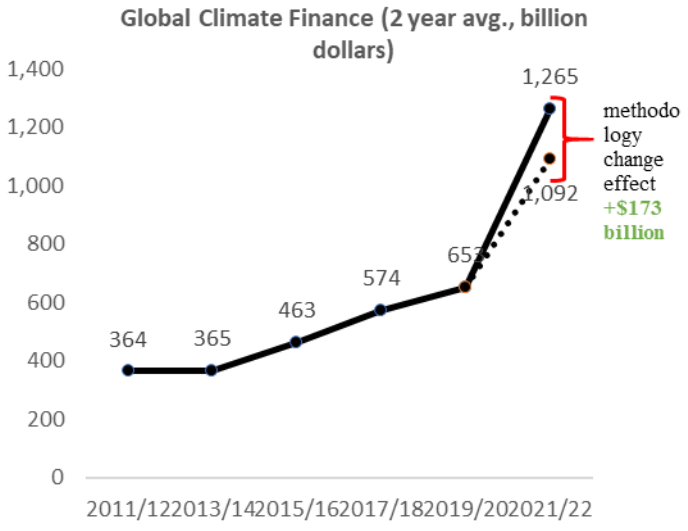
CBI: The Rising Cost of Inaction in Climate Investments

The 2023 edition of the Global Landscape of Climate Finance report has been published by the Climate Policy Initiative (CPI). The report states average global climate finance flows were recorded at around USD 1.26 trillion in the 2021-2022 period, a 94% increase on the previous two-year period - in which a USD 439 billion increase in mitigation investments in renewable energy and transportation sectors played a central role. Methodological improvements and new data sources have contributed to this figure by around USD 173 billion. However, these flows only represent around 1% of global GDP despite the growth witnessed in 2021 and 2022.

CPI calculates that USD 9 trillion in climate financing will be required to limit global warming to 1.5°C by 2030, demonstrating that need for a seven-fold increase over the current figure. The report also states that the cost of inaction in pursuing timely climate investments in line with the 1.5°C target will be considerably higher. CPI also calculates the climate financing needs between 2025 and 2050 as USD 266 trillion. Additional economic cost of the business-as-usual scenario where global warming exceeds the target on the other hand, is calculated at approximately USD 1.3 quadrillion. The report also indicates that this amount may be an incomplete assessment due to not accounting for potential capital losses, nature and biodiversity losses and damages arising from possible conflicts and migration movements.

The report also indicates that there is not only inadequate growth in climate finance but also an unhealthy geographical distribution. While emphasizing that countries with high emissions and those exposed to major climate risks have not achieved the necessary progress to meet their financing needs, the report draws attention to the fact that ten countries most impacted by climate change received only 2% of total climate finance (USD 23 billion) between 2000 and 2019.

Average temperatures in Türkiye were recorded 1.5° and 3.2° above seasonal averages in October and November respectively.



Source: CPI, TSKB Economic Research

Ecosystem 101

Ecosystem Services

direct and indirect contributions of ecosystems to life and nature as well as social and economic welfare

Invasive Species

organisms which are not native or indigenous to a particular ecosystem that cause economic and environmental damage to the area where they flourish

Nature Positive

enhancing the resilience of nature, the planet and society by stopping and reversing losses to nature

Social Cost of Carbon

the total damage that each extra ton of carbon dioxide emissions causes to the economy, society and the environment, as calculated in monetary terms

Climate Justice

Climate Litigation: Another Transforming Field

Climate litigation is one of the fastest growing areas of the ecosystem crisis with implications on the individual, social, and economic aspects of our life. It is binding in many instances, leading to compulsory changes in the way we live, while guiding many other aspects of our way of doing business in a non-compulsory manner.

A recent UNEP and Columbia University report indicates that, climate related court cases around the world had increased from 884 in 2017 to almost 2,500 by the end of 2022. The parties to climate litigation vary between governments and corporations, local governments, NGOs representing young people, elderly or vulnerable populations and even individuals. The litigation comes at every level of jurisdiction at an international, regional and national level, and cover a wide range of issues.

Governments are sued for the lack of stronger regulatory enforcement on the grounds of their obligations stemming from international treaties, the role of human rights or the right of people to a healthy environment, for example. However, governments may face legal action from companies as well, for overstretching their regulatory power at the expense of economic profit. Companies face legal action for having inadequate climate plans or targets, for inaccurate narratives regarding their emissions on their path to net zero, or face calls for compensation for to their climate damaging activities. Public and private investment decisions are subject to legal challenges for not integrating climate considerations, standards or principles, and the flow of finance to high-emitting or environmentally harmful projects or activities is often questioned in courtrooms.

Within this ever-expanding field of climate litigation, it is also important to have a future trends are also important to watch. A report by London School of Economics' Grantham Research Institute predicts that litigation may be focused on the nexus of biodiversity and the climate in the coming years, particularly around measures to restore forests, the duties of governments and corporations to protect oceans, the impacts of extreme weather events and historical responsibilities leading to such damages, the effects of short-lived climate pollutants such as methane as well as international litigation between states over fossil fuels.

As the world grapples with the impacts of the ecosystem crisis, the future of climate litigation is set to take a twist as it moves beyond a single climate domain. Watch this space!

Company Highlights

BAM

BAMBOO CLOTHING

In our efforts to go beyond curbing the worst impacts of the ecosystem crisis and to repair the damage we have inflicted on the natural environment, the world is turning towards endeavors which are climate, nature and people positive, and the corporate world is no exception. In the textile and clothing industry, BAM Bamboo Clothing is a good example of such companies.

Starting with sourcing the raw materials until the end of the economic life of their final products, BAM works diligently to transform how they design, make, sell, buy, use and recycle clothing. The company starts by utilizing bamboo instead of traditional raw materials in the industry such as cotton or polyester, as bamboo does not require pesticides, its harvesting emits less carbon, it needs less water to grow and bamboo releases 35% more oxygen than hardwood trees. Bamboo is not only the fastest growing crop, but also absorbs five times more carbon than hardwood trees and is able to regenerate soil health.

BAM advances its people positive pledge by advocating for fair wages and treatment throughout its supply chain, recognizing the fact that the textile industry employs around 430 million people worldwide where average legal wages are 45% below the living wage. Within its nature-positive efforts, the company aims to undertake a fully circular production and consumption pattern by developing new materials for fully recyclable and biodegradable clothes. Through these efforts, its use of organic, recycled or nature-based fiber reached more than 95% in 2022. In an industry where more than 80% of clothing is thought to end in landfill or be incinerated, BAM increased its share of certified recyclable products to 7% in the autumn of 2023 and aims to reach 25% by 2025. In its efforts to become climate positive, BAM stopped offsetting its emissions just for the sake of being labeled “climate positive” and started to work on actively eliminating emissions by mapping its Scope 1, 2, and 3 carbon footprint including the customer wash and disposal phase of its products that comprise the bulk of its emissions at 1,489 tons of CO_2 equivalent in 2022. BAM also recorded the carbon intensity of its revenue, employees and products, which are all on a decreasing trajectory.

BAM is a party to the Nature Positive Business Pledge which expects its members to develop Nature Positive Plans by undertaking a materiality assessment of their impact on nature, identifying a nature baseline as a benchmark and setting targets to address business dependencies, with an endeavor to achieve net gain or net positive long-term outcomes for nature.

In Short...

1.5°C No More

An independent study commissioned by Future Earth, the Earth League and the World Climate Research Program on the state of the climate warned that it was fast becoming "inevitable" that the 1.5ºC target to limit global warming would be missed, adding that global warming will exceed 1.5ºC before the end of this century. Minimizing the magnitude and duration of this overshoot is both essential and possible with a rapid and managed phasing out of fossil fuels.

Moving an entire Greek Village after the climate catastrophe

Following the deadly floods in September, the residents of the Greek village of Metamorfosi voted to relocate their entire community to protect themselves from future climate disasters. The village also flooded in 1953 and 1994 yet the floods which struck the Thessaly region between September 4 and 7 this year nearly submerged the entire village. After this devastation, the residents of Metamorfosi voted to build their new village around 8 kilometers away from its original location.

"So Hot" is Not Actually Cool

The 2023 Global Report of the Lancet Countdown focuses on the economic impacts of health-related consequences of the ecosystem crisis. The report states that lost earnings due to heat exposure as a percentage of GDP in 2022 was around 5% in Southeast Asia, 4% in Africa and around 2.5% in the Eastern Mediterranean region. The study also estimates that the resulting 490 billion lost hours of labour in the same year resulted in a shrinkage of USD 863 billion in global GDP. In general, agriculture is the sector most impacted by heat exposure, followed by construction, services and manufacturing.

A Lifeline for the Amazon Rainforest

Official data from Brazil shows that deforestation in the Amazon rainforest had declined by around 64% in November 2023 when compared to the same month of the previous year. However, this figure indicates that an area of rainforest equal to 201.1 square kilometers was lost in November 2023. Brazil set a target of ending illegal deforestation by 2030, which slowed the rate of deforestation by more than half in the first 11 months of this year to 4,977 square kilometers, the lowest since 2018.

Green Nobel Prize

Nature is not a specific topic like physics, chemistry or literature for Nobels - but the great grand nephew of Alfred Nobel is offering a prize to the environmental champions of the Amazon rainforest. Marcus Nobel aims to attract attention to the most exceptional environmental contributions in the last year, and this year's prize will go to Manaus, Brazil, in recognition of the city's commitment to protect the Amazon rainforest.

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