

# ECOSYSTEM REVIEW

**TSKB**

Economic Research

Issue No: 18

2025-I



**From an Ecosystem Perspective:  
Social Transformation-Social Capital**

**Climate  
Justice:**

International Court of  
Justice hears from the  
Victims of the Climate  
Crisis

**Urbanization and Energy Efficiency**

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## Who Will Build the Ark?

Greetings from our 18th issue!

As the colleagues at the TSKB Economic Research Department awoke one morning from restless dreams, they found themselves transformed in their offices into ...

Wait! Quoting Kafka is a serious business. So let me tell you what I have in mind, which is some kind of “call for action”!

Things are changing very fast. Once upon a time, volatility and unpredictability were associated with emerging markets. Today I wish all the best and patience to my colleagues who follow developed economies, led by the United States of America. It is not only the news flow but the relationship between the fundamentals that is becoming increasingly complex. On one hand, we have the obvious need for almost every country to raise their potential growth, according to the latest studies carried out by the World Bank. On the other hand, we know that this should be done in a way that is ecosystem-friendly. I am therefore not talking about a primitive growth-friendly change, but rather a regenerative transformation. Noted!

But who will pay for this investment, when the global economy is constrained by a corset of high debt and a risky inflationary outlook? Are we setting out targets that are inconsistent with our macro facts and capabilities? Let's make the question more straightforward - should we be pessimistic? And I would say “No!”

I agree that there is no quick fix to our beloved pale blue dot's problems. But I do not agree that we lack solutions. What we strive for is a transformation akin the metamorphosis of the precious Kafka.

There is no harm reiterating that whatever we achieve, we will do it in a way that is friendly to the ecosystem. I do not see it as a binding “constraint” but as a binding “principle”. Let's also put the “technological transformation” on the table as our biggest support factor, including the digital transformation. Are we all set for transforming? No? One important question remains unanswered - who will serve as the agents of change?

I have just one answer for that: It is me, it is you, it is all of us.

It wasn't raining when Noah built the ark. But now, when it has been pouring for some time, we still do not have an ark. We'd better work together to build one. Our ark will be to carry responsible actions for transformation. Knowing that the world is ageing, we need to invest in social capital to achieve this transformation. This includes re-skilling, green skills for green jobs, decent retirement following decent jobs and better payment schemes to support intergenerational independence.

Obviously, we need to speak more about the need for social transformation and invest in our social capital. While family and community lie at the heart of the latter, as a development bank we have the chance to influence workplaces through our development finance facilities, which is the third, last and broadest circle of social capital. This brings us to the point where I started - the colleagues at the TSKB Economic Research Department awoke one morning from their restless dreams and they found themselves transformed in their offices into giant agents of change supporting the social transformation. Let it begin by spreading the idea through the current issue of the Ecosystem Review. The rest we will achieve together!



## It is a new us, but it's still us



In the introduction of our issue, let's start with the answer given by our Chief Economist, Dr. Burcu Ünüvar, to the question she asked in her own writing:

"Who will serve as the agents of change??"

"I have just one answer for that: It is me, it is you, it is all of us."

Social capital and the social transformation are two concepts that are very closely intertwined. Brief definitions can help us understand the connection between concepts. According to the definition formed by [Bourdieu](#), [Coleman](#) and [Putnam](#), who are important actors in the conceptualization of [Social Capital](#), social capital depicts the mutual relations of individuals in society, and associations in which relations are based on a high level of trust and common values. Social transformation [means](#) the restructuring of all aspects of life, from culture to social relations, from politics to the economy, from our way of thinking to our way of life. Social transformation is also a requirement when it comes to the changing demographic structure. Population is not just a number; today we refer to a demographic structure that is changing and transforming more than the change in the [population](#). Social transformation and social capital are in fact two concepts that are both closely related and which support each other. Indeed, there are current [studies](#) which show that social capital is one of the main drivers of social transformation.

Without a doubt, there is a need for a transformation – such as the green transformation, the transformation of the energy system – in tackling the ecosystem crisis. Data now proves that unless we change from the current order, we cannot hope for the destination to be any better than it is today. That is why in our “Ecosystem Review”, we have for some time now been setting out that the conceptual framework of sustainability is no longer sufficient, and that it is time for a regenerative perspective to be adopted, pointing to the need for the transformation to have a broader and wider nature.

Tackling the ecosystem crisis requires a comprehensive transformation on both the consumption and production axes. The homes and the cities we live in, the cars and tools we use, the food we eat, the clothes we wear – perhaps everything about society needs to undergo a transformation. By adapting to the production structure of this new world, the transformation of the workforce and skills becomes inevitable. In short, we are on the verge of a total transformation.

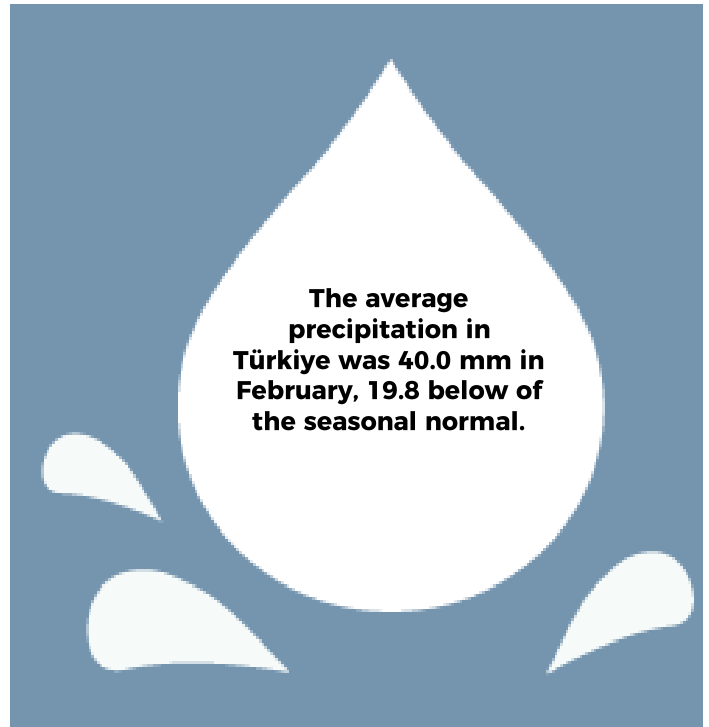
This transformation does not happen on its own and without a plan, and nor can it. A healthy transformation requires the design of the steps to be taken. As well as designing and implementing the policy, the response of these policies in society and the achievement of a social consensus also impacts the success of the policy. This is where social capital comes in.



Social capital, [which is best considered as](#) a " means to creating trust", increases the ability and motivation of society to act in line with a certain common value. Thanks to this feature, it supports, facilitates and accelerates the social transformation needed within the scope of tackling the ecosystem crisis.

There is no time to wait for the policy steps to be taken while transforming the social framework in the transformation we need to undertake in order to tackle the ecosystem crisis. It is all urgent. However, considering that the degradation of the ecosystem is the result of consistent missteps, not just from the recent past, the solution will be the result of consistent right steps, not just for the near term. This means that our struggle with the ravages of the ecosystem crisis will continue for some time to come. When we think about this, let's not forget that social capital provides great strength and resilience for societies to absorb and respond to shocks, including wars, climate change and financial crises.

Let's leave this letter here as a reminder of the links between the social transformation for a green transformation, and social capital for a social transformation.



## Glaciers are melting...

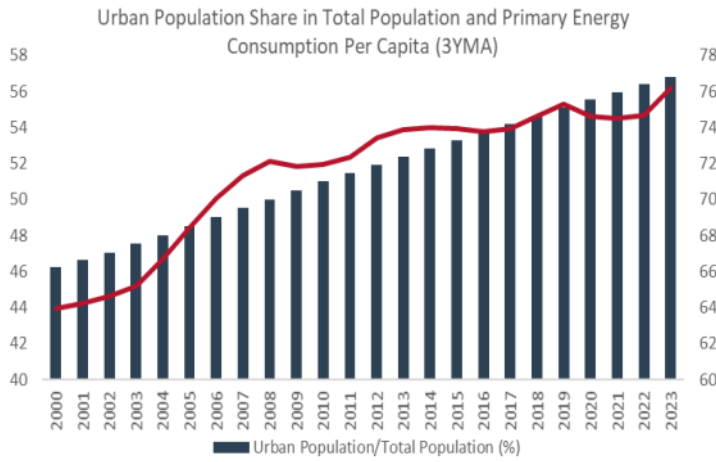
Theme of this year's World Water Day, declared by the United Nations General Assembly in 1993 and celebrated on March 22\* every year, announced as "Glacier Protection". The threat of melting of glaciers ushers in a whole plethora of problems. Melting glaciers [contribute to rising sea levels](#), which can lead to coastal erosion, while rising ocean temperatures can result in more frequent and severe hurricanes and typhoons. It is feared that the mixing of high volumes of glacial meltwater glacier into ocean waters could slow down or even stop ocean currents. These risks do not appear far-fetched: scientists observed an extreme temperature anomaly in the Arctic at the beginning of February. Warning that the increase in temperature caused the threshold required for the melting of the ice to be exceeded, the scientists described this anomaly as "very worrying". Mika Rantanen, a climate scientist at the Finnish Meteorological Institute, commented, "The lack of sea ice means darker ocean surfaces, leaving the Earth absorbing more sunlight, accelerating the process of global warming."

\* For the water issue of the Ecosystem Review click [here](#).



# Urbanization and Energy Efficiency

While the urban population constituted 57.3% of the world's [population in 2023](#), the urban population is expected to more than double by 2050 when [7 out of every 10 people](#) are expected to live in cities. However, the process of urbanization - which is expected to increase most in developing countries - is expected to lead to higher energy consumption, while supporting economic activity, infrastructure and services. The graph illustrates that the rate of urbanization is increasing in parallel with the rise in primary energy consumption. Along with the rising rate of urbanization, increasing energy consumption highlights the importance of energy efficiency.



Making cities energy efficient requires broad-based citizen support along with urban planning policies of governments and local governments. This collective approach to energy-efficient cities has found a place in European Union (EU) policies. In addition to undertaking investments in energy efficiency in transportation systems and public services in the EU, it is also aimed at shaping the habits of societies towards energy efficiency. In Türkiye, where the urbanization rate is 77.5% according to 2023 figures, ensuring that energy efficiency is evaluated within a social mobilization approach falls under the scope of the Energy Efficiency 2030 Strategy and the second National Energy Efficiency Action Plan.

We observe the relationship between the urban population and energy efficiency through electricity demand. Extreme changes in temperatures, which are increasingly frequent, can affect the need for air conditioning, leading to fluctuations in demand, placing smart and sustainable buildings at the heart of planning energy-efficient cities.



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Governments are increasingly incorporating energy efficiency practices into their policies, ranging from mandatory labels setting out building energy performance to the construction of better-insulated buildings to respond to fluctuating demand and to prevent grid problems.

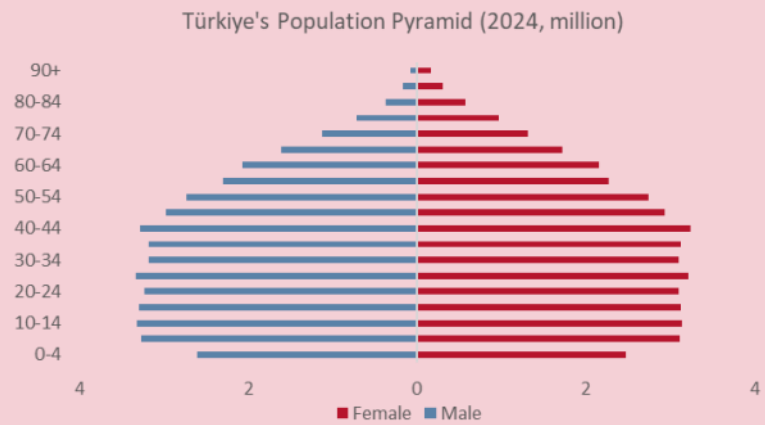
Another issue that stands out with energy-efficient cities is digitalization. Malaysia, for example, aims to increase the number of smart meter<sup>1</sup> installations that contribute to resilience from 1.8 million in 2022 to 9.1 million in 2026 while India is targeting a 100% electrification rate in its railways by 2025 and the addition of 50,000 new electric buses to its fleet by 2027. Efficient electrification processes are expected to contribute to energy efficiency by reducing energy consumption by more than two-thirds for end-use technologies. However, the International Energy Agency (IEA) [states](#) that in order for digitalization in energy efficiency practices to reach a sufficient level, more innovation and financing are required, as well as the urban population should adopt consumption behaviors that will contribute to energy efficiency.

Maintaining urbanization processes by taking account of energy efficiency contributes to the expansion and uninterrupted continuation of urban services. The sustainability of the process requires society to support and comply with the policies to be implemented. In this vein, it seems inevitable that the process of energy efficiency, referred to as [the "first fuel"](#) in the world's journey to reach net zero, will accelerate the energy transformation with the contribution of social transformation.

<sup>1</sup>Smart meters measure and record energy consumption in real-time, allowing consumers to effectively monitor their energy usage and manage it based on real data.

## The median age in Türkiye which was 34 last year, rose to 34.4 in 2024

Türkiye's population increases by 3.4 per thousand in 2024 to 85.6 million. With the decline in fertility and mortality rates, the elderly population increased, the median age continued to rise, from 34 in 2023 to 34.4 in 2024. The share of the population aged 65 and over increased from 7.1% in 2007 to 10.6%. This demographic change is important since the elderly population is more [vulnerable](#) to the ecosystem crisis. According to a study, heat-related deaths are projected to increase by 0.5% under a scenario of 1.5°C warming, 1% with 2°C warming and 2.5% with 3°C warming. It is estimated that between one-fifth and one-quarter of these deaths can be attributed to the aging of the population. The vulnerabilities of the elderly population [may also vary depending on](#) factors such as region, income group, profession and gender.



## Ecosystem 101

### Social transformation

*the [restructuring](#) of all aspects of life; from culture to social relations; from politics to economy; from the way we think to the way we live*

### Social capital

*the mutual [relationships](#) between the individuals in a society based on shared values and a high level of trust*

### Green jobs

*'decent work' that contributes to the 'preservation' and 'regeneration' of our environment whether in traditional sectors or in new, green such as renewable energy and energy efficiency*

### Social trust

*the [belief](#) in the integrity and the reliability of other individuals in a society*

### World Water Day

*[declared](#) by the United Nations General Assembly in 1993, it is celebrated every year on March 22nd*

## Upcoming Events

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The International Conference on Glaciers' Preservation will be held in Dushanbe, Tajikistan from May 29 to June 1.

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The 2025 UN Ocean Conference will be held in Nice, France from June 9 to 13.

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The Bonn Climate Change Conference will be held from June 16-26.



## We are as strong as we are.



First of all, who are we? We are social capital. Though not every group of people constitute *us*. The people who make up society do not automatically create social capital. Only with the formation of economic, social, political, and psychological ties can we talk about *us* and about *social capital*.

Japan's Okinawa is a region of the World where people live healthily to 100 and older. The secrets of longevity have been the subject of documentaries and research. Most notable among them is the 2001 New York Times Bestseller book "The Okinawa Way". The book argues that Okinawa residents' long, healthy lives can be explained by [six factors](#). One such factor is the "Okinawians social groups". With strong social ties, and thus a strong social capital, Okinawians are able to help one another and make their lives easier through solidarity and cooperation.

Indeed, societies with strong social capital are better equipped to cope with difficulties. Research shows that a key determinant of the speed of post-disaster recovery, alongside the scale of the disaster and the amount of aid received, is social capital or the [togetherness](#) of society. During and after crises, societies with strong ties are able to access psychological and monetary help more easily allowing them to be more resilient.

Gender equality has an important role in the relationship between social capital and disaster resilience. Empowering women economically and socially contributes to social capital and to disaster resilience as well. [Considering](#) how the effects of disasters are often not gender-neutral, how women are often more adversely affected, it becomes clear how important working towards greater gender equality and strengthening our social capital truly is.

It is crucial to remember that the floods and the droughts becoming ever more severe and frequent with the ecosystem crisis are natural events, not disasters. What turns these events to such devastating disasters [are](#) our unpreparedness and vulnerability. Increasing resilience and preparedness is a crucial component of increasing our ability to adapt to the ecosystem crisis. With the [knowledge](#) that becoming more adaptive is getting more expensive in the coming years, let us be aware of the existence of our social capital, that we are us and that we are as strong as we are in the face of a natural event that turns into a disaster.

## Gender Equality – A Tool to Strengthen Social Capital

Social capital, which draws its strength from the bonds between individuals, is one of the important factors contributing to economic development. Gender equality, on the other hand, offers us an important opportunity to strengthen this capital. However, in the current circumstances, the ongoing [inequalities](#) between men and women can prevent women from participating in social, economic and political life as much as men. This situation can weaken the relationships between individuals and damage the "social trust" which is often discussed in social capital literature.

Social trust is [defined](#) as a belief in the integrity and reliability of other individuals and can also be expressed as "faith in people". Considering the contributions of social trust in areas such as cooperation, economic development and strengthening institutions, the importance of the steps to be taken to strengthen this trust becomes even clearer. Research indicates that the work needed to strengthen gender equality will also have positive results in terms of social trust. A [study](#) examining the questions of the World Values Survey focusing on gender and trust reveals the positive relationship between social trust and gender equality. Moreover, this is true not only for women, but also for men (Graph 1)<sup>1</sup>. A [study](#) from Latin America, which measures gender equality through labor market outcomes, arrives at a similar conclusion concerning the relationship between gender equality and social trust.

The importance of strengthening social capital and gender equality as a tool for this is reinforced by its [contributions](#) to post-disaster recovery. New temperature records are broken each month due to the ecosystem crisis and extreme climate events, which are ever increasing in frequency, remind us once again of the importance of disaster preparedness. One of the important steps we can take to increase our preparedness and accelerate the recovery and reconstruction after disasters is to strengthen our social capital.

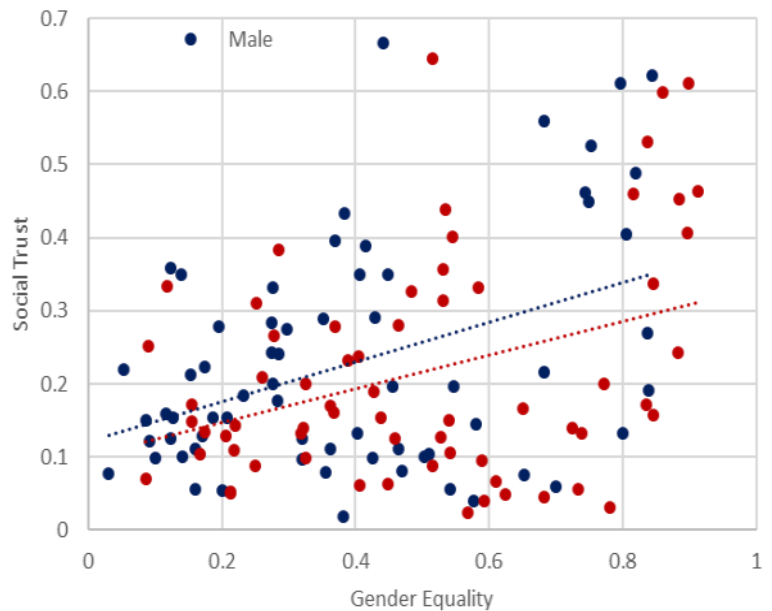


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Gender Equality and Social Trust



Source: World Values Survey Wave 7 (2017-2022), TSKB Economic Research

When all these factors are evaluated together, we would note that gender equality can provide significant benefits in terms of resilience by establishing social trust and strengthening social capital. This is why coming together in the struggle for gender equality will be a crucial step not only in taking a stand against the injustices that women face, but also to create communities which are connected to each other with stronger ties.

<sup>1</sup>Haerper, et al. (2022). World Values Survey: Round Seven – Country-Pooled Datafile Version 6.0. Madrid, Spain & Vienna, Austria: JD Systems Institute & WWSA Secretariat. doi:10.14281/18241.24

## Multilateralism Needs to Be Strengthened

Our planet has had a rough start to 2025. As you may recall, in the first days of the year, the eyes of the whole world turned to the US state of California. The fires, which spread over a wide area, ravaged approximately [23,000 hectares](#), resulting in the loss of 29 lives and the destruction of over 16,000 buildings. The fires, which could only be brought under control with intensive efforts, lasted for two weeks, forcing [around 200,000](#) people to leave their homes. According to estimates from Accuweather, which provides weather forecasting services worldwide, the fires caused [between \\$250 and \\$275 billion](#) in material damage and economic loss, placing the fires as one of the costliest disasters to be experienced in the history of the United States and the world.

Of course, as seasoned readers of Ecosystem Review will surely be aware, the fires in California are not an isolated incident. On the contrary, these fires are part of a trend created by the ecosystem crisis. A [study](#), recently published by Carbon Brief, illustrates the link between climate change and extreme weather and climate events. The Carbon Brief, which compiles scientific studies on the relationship between 735 weather and climate events which have taken place around the world and climate change in the last 20 years, noted that 74% of these events had either become more severe or more likely due to climate change.

In the light of this data, some of the executive orders signed by Donald Trump, who was reinstated as US President in January, in his first hours in the White House are even more striking. President Trump has announced that he will once again withdraw his country from the Paris Climate Agreement and ordered the US International Climate Finance Plan to be halted. In addition to being the country with the largest share in historical emissions,



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the USA is also home to some of the land most at risk of disaster due to various natural events intensified by climate change, especially storms.

The 29<sup>th</sup> United Nations Climate Change Conference (COP), which took place in Baku last November, left behind a landscape of the wreckage of "multilateralism", damaged by both a stalled negotiation process and the discourse over neutrality of the COP Presidency, as set out in detail in the [latest issue](#) of On the Ecosystem. On this point, the climate denialism of President Trump and other leaders following his form of governance could open new breaches in the agreed-upon principle of "common but differentiated responsibilities" in climate action. However, international cooperation still has an important place in making the world livable again. The strong [messages](#) from senior officials in Brazil, which will host the COP30, that an ambitious and results-oriented conference will be held this year to encourage regional and global coordination is encouraging. Time will tell on the extent these words can turn into reality.



**Average temperatures in Türkiye were recorded 2.4°C in February, 1.7°C below seasonal normal.**



# Climate Justice

## International Court of Justice hears from the Victims of the Climate Crisis

In the last month of 2024, the International Court of Justice (ICJ) hosted its largest hearing yet. Attentive readers will remember that we also included the news of this forthcoming hearing [in our September 2024](#) issue. In the case, based on the question posed by the United Nations (UN) General Assembly in 2023, the Court sought answers to whether countries are obligated to protect the climate, and whether they should face legal sanctions if they cannot overcome these obligations.

Although climate litigation has become increasingly common, especially in the wake of the Paris Agreement, such cases [have rarely been on the agenda of international courts](#). So how did countries' climate responsibilities come to be brought to the International Court of Justice? To understand this, return back 2021 Vanuatu, a small island nation in the middle of the Pacific Ocean. According to the latest figures, Vanuatu is a typical example of the unequal effects of climate change, with a population of 313,000 people, producing just [0.71 tonnes of CO<sub>2</sub> emissions](#) per capita per year, but facing an existential risk posed by rising sea levels. With the effect of cyclones, which have grown more commonplace as a result of the climate crisis and the food security risks created by this situation, the country decided to bring the issue to the international arena in 2021 and take its case to the UN. The country, which garnered sufficient support in the General Assembly, was given the right to take its case to the International Court of Justice.

Vanuatu's Special Envoy for Climate Change and [the Environment, Ralph Regenvanu](#), pointed out that his country is on the front line of a crisis that it did not create in what he considered to be perhaps the most important case in human history. He called on the Court to recognize that the damage caused to people by the cli-

mate crisis is unlawful and to recognize that it must be ended, and its consequences repaired. Unfortunately, Vanuatu [is not a rare case](#). His call to those responsible for the climate crisis, from which the country has paid a disproportionately high price, resonated with many other countries and continues to do so. In the hearings held before the court is posed to announce its decision, 91 countries and non-governmental organizations submitted their statements regarding the case, with nine African countries issuing statements on how they have been affected by climate change.

The advisory opinion of the International Court of Justice on this case is of high importance, even though the Court lacks enforcement power and rather acts in an advisory capacity. Since the decision taken by this institution, also referred to as the World Court, will offer us some bearing on the international obligations of countries, it will have the potential to affect the existing legal order in the long run. The International Court of Justice is expected to share its advisory opinion [in 2025](#).

<sup>1</sup> As a comparison, this figure is recorded at the level of 5.53 tons in Turkey and 14.21 tons in the USA.



## What about Human Capital?

The Green transformation, technological transformation and social transformation have emerged as three critical priority areas for development economics addressing the [ecological crisis](#). The employment aspect of the transformation processes is critical in terms of both economic and social implications. Bearing in mind that we risk taking a myopic approach while in it, in this section of our issue, we look from the outside in to see what kind of social transformation the green and technological transformations can bring in the not-too-distant future, with a focus on human capital, where the most striking realities of social transformation can be seen.

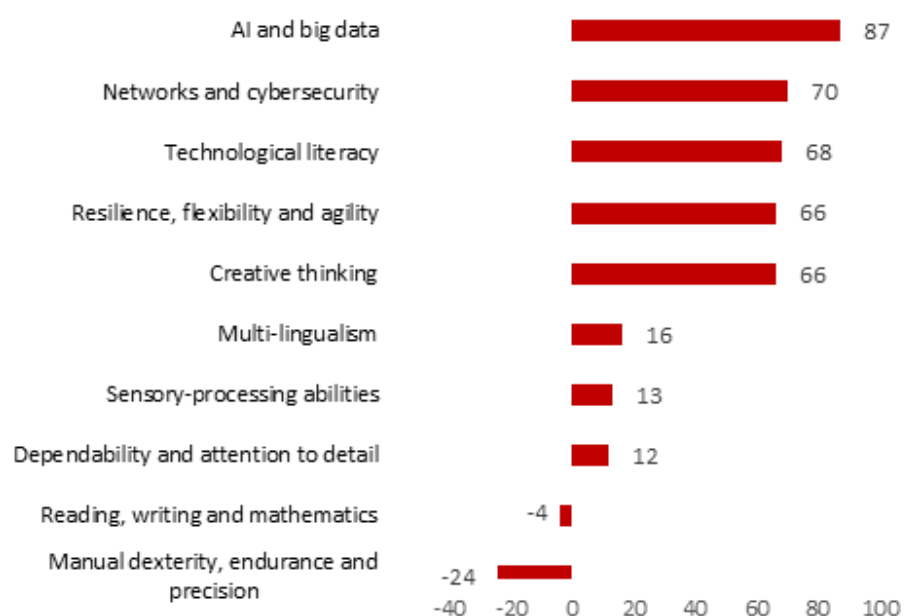
The World Economic forum (WEF) published its the latest The Future of Jobs Report in January, based on survey data collected from employers every two years since [2016](#). According to the report, there are five macrotrends driving labour market transformation – technological change, geoeconomic fragmentation, green transition, demographic shifts and economic uncertainty – to influence job growth and decline by 2030. A total of 170 million new jobs are predicted to be created by 2030 with 92 million existing positions being displaced, resulting in net employment growth of 78 million jobs (7% of current employment). Of course, new job creation and displacement will help re-shape skill sets. According to the report, a large number of companies expect "artificial intelligence and big data" skills to develop between 2025 and 2030. In contrast, manual dexterity appears to be losing importance.

A fair distribution of the costs and benefits of future transitions is a significant concern both across countries and within societies. In a global economy increasingly defined by digital skills, 2.6 billion people continue to lack a secure internet connection, while 760 million people globally are without [electricity](#).

Transformation is unavoidable; it has begun and will continue. To ensure no one is left behind, investing in human capital, which has been overshadowed by many investments in transition or transformation plans, appears more crucial than ever.

According to [studies carried out](#), one strategy to strengthen human capital is to promote social capital. Close links and trust help people acquire and transfer education, experience, knowledge and skills. Supporting social capital by equitably distributing opportunities and guaranteeing overall social transformation will be our key strength in this struggle.

Net Skill Development\* (% , 2025-2030)



\* The values are a clarification of the ratios of employers who believe the importance of the relevant skill will increase and those who think it will decrease.

Source: World Economic Forum, TSKB Economic Research

## Green Jobs



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The green transformation, which is closely intertwined with the issues we have long brought to the agenda in our Ecosystem Review, has brought another concept within the employment context: “Green Jobs”. Quoting the International Labour Organization’s (ILO) [definition](#), Green jobs are ‘decent jobs’ that help ‘preserve’ and even ‘regenerate’ the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency.

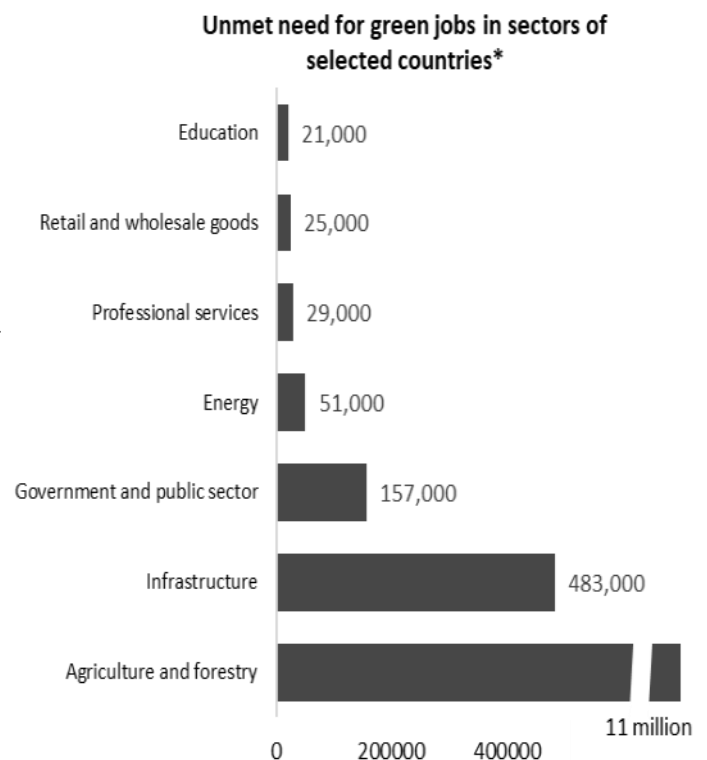
According to the Future of the Jobs Report published by World Economic Forum (WEF), the changes related to green transformation represent the third most important driver of the transformation and reshaping in the employment market. Accordingly, it is predicted that adapting to climate change will create 5 million new jobs globally by 2030, while mitigating the effects of climate change is expected to create a net of 3 million [jobs](#).

It should not be overlooked that new employment opportunities are for potential new jobs, and should be filled by those with green skills. Given that the green transformation will transform some industries to carbon-neutral production, green job vacancies are likely to emerge in these sectors.

The WEF calculated the gap between the number of green jobs the number of green jobs currently available and the number required to meet the emissions reduction targets by 2030 and in some leading sectors in the 10 major economies. It is clear that many sectors, particularly agriculture and forestry, will need to transition to green jobs. Employers who fail to take the necessary steps in this area and employees who do not close the sector's skills gap will inevitably experience losses.

On the other hand, the industrial sector, which includes

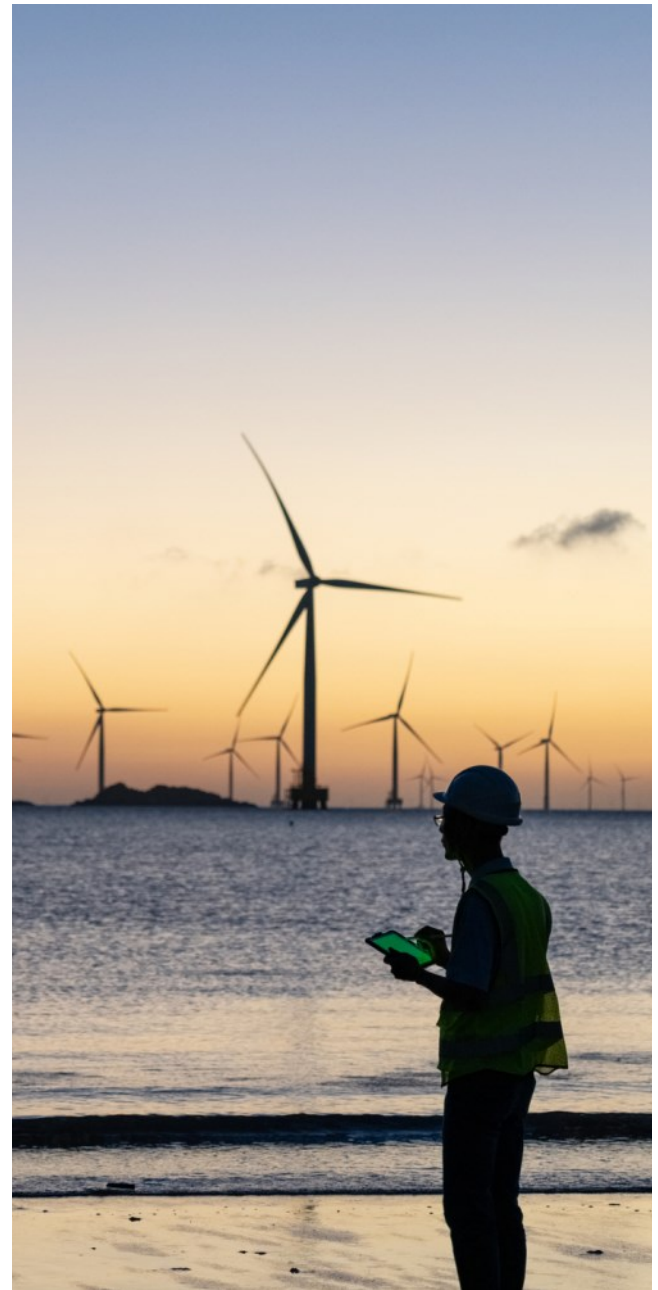
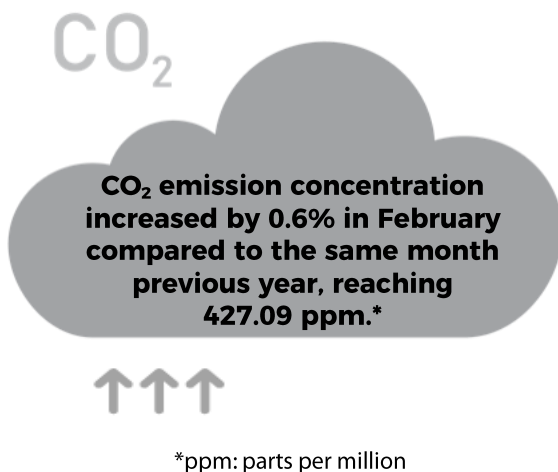
automotive, aviation, mining, and metals sectors, is expecting to experience major transition as corporations step up their decarbonization efforts. As many as 71% of employers in the automotive and aviation sector, and 69% in the mining and metal industries expect carbon emission reductions to transform their firms. Given the carbon-intensive nature of these sectors, decarbonisation will significantly transform them and their workforces, and workers will need to be reskilled to remain in their current jobs or transition to alternative jobs.



\* USA, United Kingdom, Germany, India, Japan, Spain, China, Brazil, South Africa, Australia  
Source: World Economic Forum, TSKB Economic Research



A study of LinkedIn members found that hiring among those with green skills was considerably higher than for other [members](#) and that this rate is rising. It also shows that increase in demand for green skills (11.6%) is expected to expand twice as rapidly as the supply (5.6%) in 2024 when compared to 2023. It is estimated that by 2030, there will be a green skills gap for one in every five jobs due to the difficulty to meet the demand for such jobs, with this gap expanding to one in every two jobs [by 2050](#). In this scenario, there is no reason to worry, but there is also no room for complacency.



## **Climate Law draft submitted to the Presidency of the Grand National Assembly of Türkiye.**

The law establishes general principles in the efforts to tackle against climate change, the reduction of greenhouse gas emissions, climate change adaptation activities, planning and implementation tools, permitting and supervision and the legal and institutional framework related to them. Progress in the reduction greenhouse gas emissions and climate change adaptation activities will be monitored by the Climate Change Directorate. The Directorate will also be responsible for ensuring coordination between institutions, determining activities and standards, monitoring developments, and regulating market-based mechanisms for carbon pricing. According to the statement, the bill targets the achievement of 'Net Zero by 2053' and the 'Green Growth' vision. The law aims to strengthen the climate adaptation process in cities, to buttress the economy against the negative consequences of climate change, to increase the international competitiveness of sectors and create cleaner and more efficient production processes in all sectors.

# Company Highlights



The clothing industry is one of the most damaging industries for nature. According to a study published by the European Parliament, 2,700 litres of fresh water is used to produce just one T-shirt made of cotton, equal to one person's needs for drinking water over about [2 ½ years](#). When considering the land use required for the production of cotton and other fibers, the negative impact on the environment becomes even more apparent. In fact, production systems which prioritize short term productivity may fail to provide the necessary care of the soil ecosystem and biodiversity.

Environmentally friendly clothing has gained momentum given our planet's current situation. Many big clothing companies are targeting the use of sustainable materials that do not cause damage to the ecosystem and which minimize waste and pollution by using water and energy efficiently in production processes. The US retailer, Patagonia, which provides clothing and equipment for outdoor activities, is a few steps ahead of the common practices.

Operating with approximately 3,000 employees in North America, Patagonia is considered to be one of the most sustainable companies of the world. The company is intensively using recycled polyester and nylon, heading for 100% recycled wool since 1996. It chooses organic cotton to prevent the usage of pesticide and herbicides, reducing its CO<sub>2</sub> emissions by 48% per kilogram compared to

the traditional cotton. Since 1985, Patagonia has been part of a global network of companies called “1% for the Planet”, and within this scope it donates 1% of its sales revenue to national and international environmental groups that aim to protect nature. The company has provided more than USD 140 million in resources to these groups over time.

Another development which sets Patagonia's journey apart took place in 2022. The founder of the company, Yvon Chouinard, with his wife and kids transferred their shares to a trust and non-profit institution which was designed specifically. With the aforementioned organization, it is aimed at using the companies' annual profit of about [USD 100 million](#) on tackling climate change and protect undeveloped land.

Patagonia's steps for the nature go hand in hand with its efforts to ensure ethical supply and employee wellbeing. The company is ensuring that fair pay and decent working conditions are mandatory in all its supply chains, and conducts regular checks in their production centres.

Patagonia's story could be unique and may not be repeated easily. Nevertheless, this story serves as a valuable example of how being transparent and sustainable do not always mean compromising on profitability at a time marked by shifting consumer preferences.

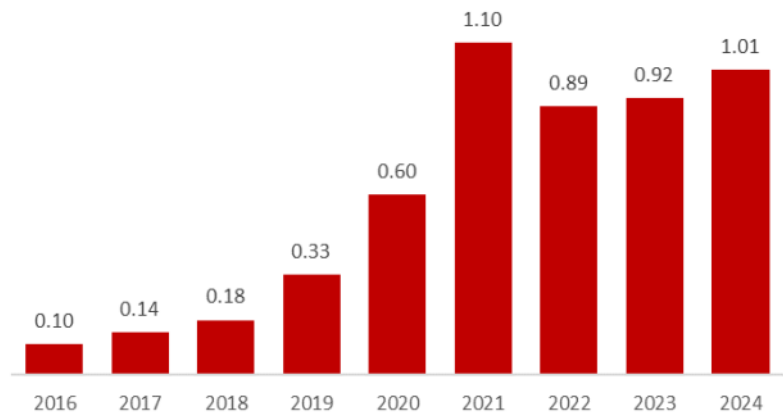
# Climate Finance

## Green and sustainable bond issues reach their highest level since 2021

According to Bloomberg data, worldwide green and sustainable bond issuances reached [USD 1 trillion](#) in 2024, approaching the peak of USD1.1 trillion reached in 2021. Delving into the sub-items, green bond sales, which account for the majority of overall financial product sales, increased by 8.7% compared to the previous year to reach USD571 billion, pipping the previous high of USD563 billion recorded in 2021. Sustainability bond sales

increased by 29% YoY to USD240 billion in 2024, while social bond sales increased by 12.6% YoY to USD158 billion. In contrast, sales of sustainability-related bonds decreased by 38% YoY to USD 42 billion.

Green and Sustainable Bond Issues (trillion USD)



Source: Bloomberg, TSKB Economic Research

## Disaster bond issues reach a new record in 2024.

According to Artemis's 2024 [fourth quarter report](#), which examines the

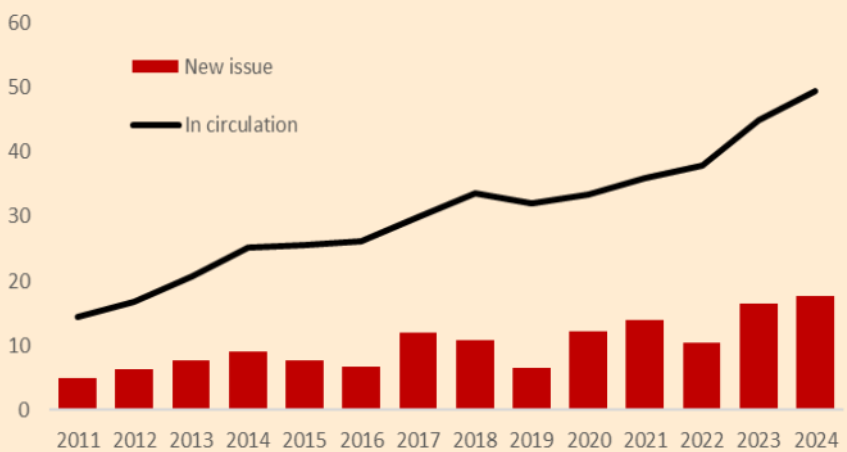
insurance-related securities market, 93 transactions were conducted last year resulting in the issuance of USD17.7 billion in disaster bonds. The new issuances in 2024 broke the previous record of USD16.4 billion set in 2023, while the outstanding market at the end of the year grew 10% to reach

USD49.5 billion. The number of disas-

ter bonds in circulation has increased every year over the last decade, with the exception of 2019. During this time, the average annual increase was 8%.

While insurance companies seek ways of managing the risks caused by climate related disasters, disaster bonds have gained momentum as an important tool to transfer these risks to private investors. In parallel with their high-risk nature, these bonds provide more benefits than many other assets with fixed interest. In 2024, investors [gained](#) a 16% rate of interest - slightly lower than the record 20% rate of interest recorded in the previous year.

Disaster Bond Issues (billion USD)



Source: Artemis, TSKB Economic Research



# In Short...

## USA and Paris Climate Agreement

U.S. President Donald Trump signs executive order after taking office for the U.S. to withdraw from the Paris Climate Agreement signed in 2015. The U.S. withdrew from the agreement during President Trump's first term, and the agreement was re-signed under President Joe Biden. According to the Financial Times, after this move by the USA, [attention turned](#) to whether Argentina would also leave the agreement. The country withdrew from the 29<sup>th</sup> United Nations Climate Change Conference (COP 29) negotiations last year and announced that it would reconsider its international climate commitments. If Argentina withdraws from the Agreement, it will become the fifth United Nations member state not to be a party to the agreement, after United States, Iran, Libya and Yemen.

## Omnibus Package

European Commission proposes Omnibus Package. The proposed package aims to reduce bureaucracy and simplify rules for citizens and businesses, creating an environment more conducive for EU companies to grow, innovate and create jobs. In this context, the Commission aims to reduce the administrative burden by a total of 25% (and 35% for SMEs) by 2029. According to the package, the Carbon Border Adjustment Mechanism (CBAM) will be simplified and small companies will be exempted from CBAM. The package also includes a proposal to postpone the obligation to purchase CBAM certificates. Simplifications in sustainability reporting standards and due diligence processes and reducing administrative burden are also included in the Package.

## Clean Industry Agreement

Under the Affordable Energy Action Plan, this agreement aims to save EUR

260 billion annually until 2040. The action plan aims to address energy supply costs, grid fees and levies while also supporting the wider adoption of energy efficiency solutions. The energy savings in this vein are predicted to reach EUR 45 billion in 2025.

## United Nations Biodiversity Conference (COP16)

COP 16 held in Colombia last November and ended with no solution, reopens the agenda in Rome. The negotiations continued from February 25 to 27. In the negotiations, which took place without the participation of the United States, an agreement was reached on the new financing strategy, but the talks on the establishment of a global nature fund, which is one of the main demands of developing countries, were postponed until 2028 after they failed to reach an agreement. The financing agreement is aimed at increasing the annual financing amount to USD 200 billion by 2030 in order to achieve the goals of the Kunming-Montreal Global Biodiversity Agreement, which was adopted in 2022. In this context, a call was made for developed countries to provide USD 20 billion in nature conservation financing to poorer countries by the end of the year.

## Extreme Weather Events

Türkiye was subjected to 1,257 extreme weather events last year according to data provided by the Turkish State Meteorological Service. Thus, 2024 became the second year with the most extreme weather events in the last 64 years. Heavy rainfall and floods accounted for 35% of the extreme weather events recorded in 2024, with storms accounting for 20% of the weather events and hail accounting for 18%. Last year was also recorded as Türkiye's hottest year in the last 54 years. The average temperature in 2024

was 15.6°C, exceeding the 1991-2020 average by 1.7°C.

## Energy Transition Investments

Investments in energy transition reached USD 2.1 trillion in 2024. According to the "Energy Transition Investment Trends 2025" [published](#) by BloombergNEF report, investments in the energy transformation exceeded USD 2 trillion for the first time, increasing by 11% compared to 2023, with China accounting for two thirds of the investment. The electric transportation had the largest share in investments, accounting for USD 757 billion of the total. The report emphasized that investments in areas such as nuclear, carbon capture and storage and electric heating, which constitute 7.4% of energy transition investments, fell by 23% in 2024, with all of these investments accounting for only 37% of the 2050 Net Zero target.

## Share of solar power in EU electricity generation surpasses coal

According to the Ember Climate "European Electricity Outlook 2025" [report](#), the share of renewable energy sources in electricity generation reached 47%, while the share of electricity generated from solar energy was 11%. The share of coal in electricity generation remained at 10% with the share of electricity generated from natural gas declining for a fifth year in succession. At the same time, emissions from the electricity sector in the EU have fallen to less than half of their 2007 peak. Ember Climate highlighted issues such as flexibility, grid infrastructure and faster expansion of electrification to sustain the growth of clean energy sources, while emphasizing the need for storage and demand flexibility for solar energy.



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