



CLIMATE POLICY DIALOGUE IN THE EASTERN MEDITERRANEAN EVEN MORE IMPORTANT

Introduction

POLICY NOTE

Excessive use of fossil fuels has led to dire consequences of global warming, in particular with increasing greenhouse gas emissions, causing global surface temperature in the period 2011-2020 to rise by an alarming 1.1 °C above the period 1850-1900³. This situation, together with the lack of a production-consumption balance between countries and regions, unsustainable energy use and uncontrolled greenhouse gas emissions, causes global warming to accelerate. In particular, the global average temperature of 17.23°C recorded worldwide on July 4, 2023 once again shows that global warming is an urgent threat. This new record concretely demonstrates the effects of climate change and emphasizes the seriousness of the temperature increase. Graph 1 visualizes the global and northern hemisphere temperature anomaly, making it clear that the northern hemisphere has been warming faster than the global value in the last 20 years. This trend strengthens the possibility that this difference may increase further in the coming years. In particular, the Eastern Mediterranean Region has a 20% faster warming rate compared to other basins in the northern hemisphere⁴. This shows that the region is particularly vulnerable to the effects of climate change and is in an urgent situation. In this context, it is inevitable that the effects of global warming will continue to increase not only in the recent past but also in the future.

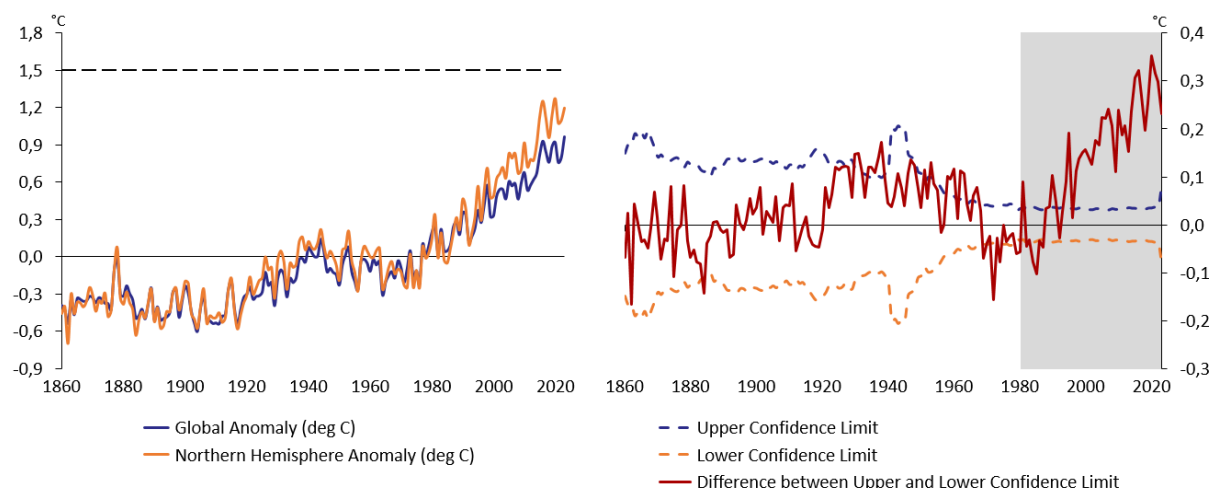
¹ <https://www.tepav.org.tr/en/ekibimiz/s/1464/Elif+Guler>

² <https://www.tepav.org.tr/en/ekibimiz/s/1462/Sercan+Sevgili>

³ IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

⁴ United Nations Environment Programme/Mediterranean Action Plan and Plan Bleu, 2020. State of Environment and Development in the Mediterranean. Nairobi.

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Graph 1. Global and Northern Hemisphere temperature anomaly (1850-2023)

Source: Eurostat climate change indicators, 2023

The effects of climate change worldwide are seen as natural disasters such as drought, forest fires and floods. In addition, climate change constitutes a national security issue that concerns the whole world. The Mediterranean Experts on Climate and Environmental Change (MedECC) has stated that unless political and economic measures are taken soon, extreme heat waves will increase, many cities will become almost uninhabitable, especially for poor and vulnerable populations, food shortages and water-borne diseases will become widespread. The Eastern Mediterranean has become an important region for national security. Since the Eastern Mediterranean Region is located in a geopolitical region with its close proximity to the European Union and being at the centre of trade routes.

Up to the present, there have been many initiatives in the world on climate change and low carbon economy, but no concrete progress has been made. At TEPAV on 6 October 2023 held at the "**Green Transition to a Low Carbon Economy Based on Renewable Energy against Climate Change in the Eastern Mediterranean Region Workshop**", many esteemed names took part as speakers and it was aimed to create a series of decisive actions and solutions.

The objectives of this report, prepared in line with the topics discussed at the workshop, can be listed as follows:

- To establish a climate policy approach to mitigate the impacts of climate change in the Eastern Mediterranean,
- Promote the transition to a low carbon economy based on renewable energy,
- To identify possible areas of co-operation with the Eastern Mediterranean countries,
- To create a set of policy recommendations for the benefit of states to minimize future energy, water and food crises.

What Has the World Done Against Climate Change in the Last 20 Years?

With the European Green Deal (EGD) announced in 2019, the EU set the goal of becoming the first carbon-neutral continent in 2050. In line with this goal, the EU announced that it will adopt a new growth strategy and reshape all its policies according to sustainability. The geopolitical implications of this agreement are quite significant and may lead to various effects as follows:

- 1. Energy Independence:** It aims to increase the EU's energy independence by reducing fossil fuel imports. Thus, it can increase the EU's energy supply security and reduce its dependence on external energy resources.
- 2. Trade and Diplomacy:** It could increase EU demand for low-carbon technologies and sustainable products. This could affect trade relations and diplomatic processes with other countries.
- 3. Global Climate Diplomacy:** It can strengthen the EU's role as a global climate leader. It can incentivize other countries to increase their climate targets and closer climate agreements between countries.
- 4. Geopolitical Competition:** The EU's green transformation could increase competition with other major economies. In particular, large economies such as China adopt similar green transformation goals and may create competition in the field of green technology.
- 5. Social and Economic Inequality:** The Green Deal could accelerate the green transformation in some regions, while leading to job losses in other regions. This could lead to increase in social and economic inequalities within and outside the EU.
- 6. Refugees and Migration:** Climate change and environmental degradation can displace people, making living conditions in some areas more difficult. This could pose new security and human rights challenges for the EU or other countries that have adopted the agreement.

In line with the European Green Deal, the "Fit for 55" legislative package was published by the European Commission in 2021 to review sectoral policies to achieve 55% emission reductions by 2030 compared to 1990 levels. One of the most important elements of the package that will affect international trade is the Border Carbon Adjustment Mechanism (CBAM), which will be implemented for the first time in the world. This is a carbon market based on a cap-and-trade system of emission allowances for energy-intensive industries and the electricity sector. Since its implementation in 2005, the EU's emissions have decreased by 41%. Also in Turkey, CBAM was implemented on 1 October 2023.

As the Intergovernmental Panel on Climate Change (IPCC) stated in their latest assessment report, either we start to decarbonize now, or it will be too late for our planet. Also, the RePowerEU Plan published in May 2022 by the European Commissions, states that there is a "double urgency" to transform the energy system of Europe since they want to tackle the climate crisis as well as end the EU's dependence on Russian fossil fuels.

The Ukrainian War has shown that the challenges of the energy crisis and climate change cannot be solved alone. Therefore, a collective effort is needed in the green transformation process. In this war, Russia utilised hydrocarbon resources on which the EU is dependent. In this context, the energy crises experienced around the world have once again revealed the importance of the transition based on renewable energy.

General Situation in the Eastern Mediterranean

Climate changes in the Eastern Mediterranean Region are a significant reflection of environmental changes worldwide. The climate in the Mediterranean Basin is changing faster than global trends in the past and as predicted by climate models, and the average annual temperature of the region is 1.5 °C higher than in the pre-industrial period⁵. At a time when

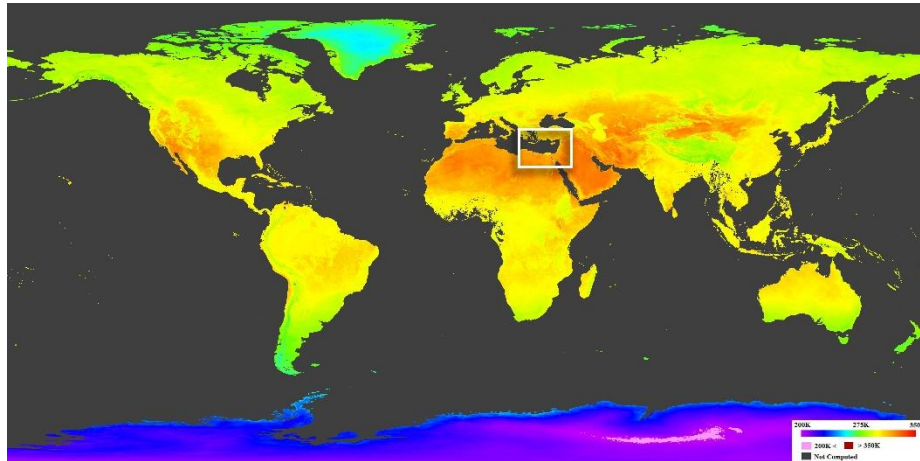
⁵ MedECC (2020) *Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report* [Cramer, W., Guiot, J., Marini, K. (eds.)] Union for the

climate change is affecting not only the natural life but also the social and economic life of the people of the region, it has become essential to understand and address these transformations in the region.

Accordingly, in 2009, Israel's discovery of natural gas deposits in the Eastern Mediterranean has been an important factor that has undermined the sustainability of natural resources in the process. After this discovery, the energy-oriented solidarity between Israel, Egypt, Southern Cyprus and Greece resembled more interest-oriented and short-term rapprochement than friendship⁶. Moreover, while the "EastMed Pipeline Project" and the "EMGF" will contribute to the security and prosperity of the region and beyond in the short and medium term, they will be insufficient to combat the adverse effects of climate change, which will pose an even greater threat to the security of the Eastern Mediterranean.

There is a strong evidence that the Mediterranean Region is warming critically. Basin-wide annual mean temperatures are now 1.54 °C above the 1860-1890 level for land and marine areas⁷. Multiple climate model simulations predict that temperatures will increase in the region. On the other hand, the amount of precipitation observed in the Mediterranean Basin during the winter months is decreasing. Since the months experienced in the region are mild, precipitation rates are decreasing. In the future, an increase in inter-annual variability and intensity of precipitation is estimated in the precipitation regime.

Figure 1. World temperature map



Source: USGS, 2023

CO₂ emission changes and gross domestic product (GDP) data in the Eastern Mediterranean countries between 2000 and 2020 are shown in Graph 2. While GDP is growing in the EU, CO₂ emission rates are decreasing. This means that the economy and CO₂ emissions are decoupled from each other. Therefore, this shows that they have learnt how to deal with greenhouse gas emissions while achieving economic development. However, when the

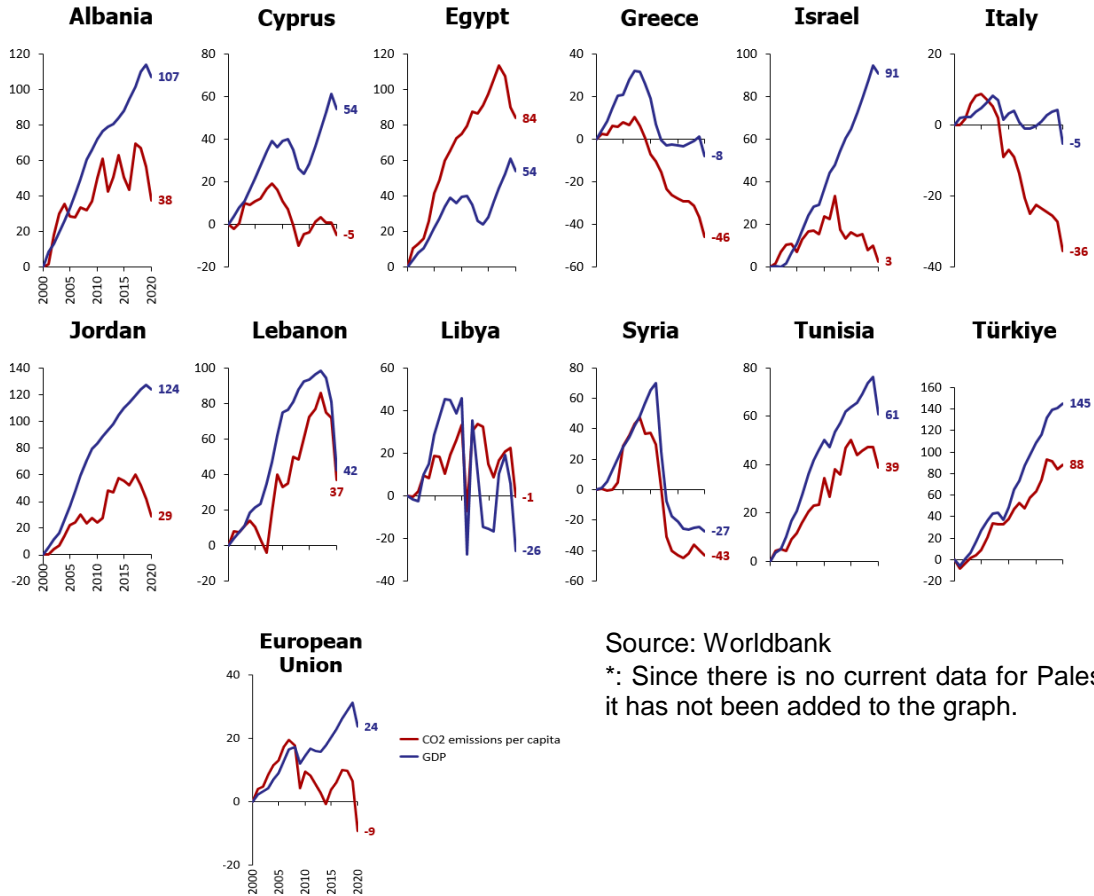
Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France, 632pp, ISBN 978-2-9577416-0-1, doi: [10.5281/zenodo.4768833](https://doi.org/10.5281/zenodo.4768833).

⁶ Öney, S. (2019). *Doğu Akdeniz'in Asıl Krizi İKLİM DEĞİŞİMİ*. EURO Politika, 3 (2) , 26-30. Retrieved from <https://dergipark.org.tr/pub/europ/issue/60585/892221>.

⁷ MedECC (2020) *Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report* [Cramer, W., Guiot, J., Marini, K. (eds.)] Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France, 632pp, ISBN 978-2-9577416-0-1, doi: [10.5281/zenodo.4768833](https://doi.org/10.5281/zenodo.4768833).

Eastern Mediterranean countries are analysed, it is seen that the economy and CO₂ emission rates follow a parallel course. Among the Eastern Mediterranean countries, Turkey is the country with the worst situation.

Graph 2. CO₂ emissions level in EastMed Region, year 2000 and 2020



Source: Worldbank
 *: Since there is no current data for Palestine, it has not been added to the graph.

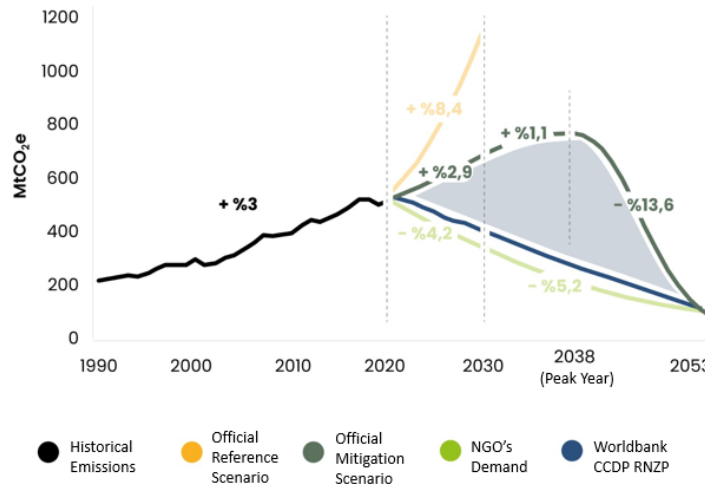
What is the General Situation of Turkey against Climate Change?

Turkey has been developing various strategies, actions, policies and legislation to combat climate change since the 2000s. Following the ratification of the Paris Climate Agreement in 2021, Turkey set the goal of reaching net zero by 2053. In July 2021, the Turkish Ministry of Trade revised and published the Green Deal Action Plan and established specialised working groups to set a roadmap to achieve a carbon neutral future. Under the leadership of the Ministry of Environment, Urbanisation and Climate Change, the Climate Council held its first meeting in February 2022. Short, medium and long-term strategies and policies were determined within the scope of greenhouse gas mitigation, green financing and carbon pricing and adaptation to climate change.

In addition, Turkey prepared its first Nationally Determined Contributions (NDCs) in line with the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. With a 102% increase in greenhouse gas emissions in 20 years, Turkey confirms reducing greenhouse gas emissions by 41% by 2030 and aiming to peak its emissions in 2038 at the latest. This commitment is a medium-term roadmap for Turkey's climate policy and constitutes a basis for the public sector. However, it lacks sufficient guidance on the measures

that the private sector should take. In the revised National Contribution Declaration, Turkey has chosen a pathway that causes two times more emissions (Graph 3).

Graph 3. Average annual change in emissions



Source: SEFIA Who Will Finance Turkey's 8.6 Gt Emissions?, 2022

Turkey's National Energy Plan, prepared by the Ministry of Energy and Natural Resources, sets out the outlook for production and consumption for the period 2020-2035. This outlook aims to ensure sustainable growth of the energy sector, increase energy security, protect the environment and play an effective role in combating climate change.

While Turkey is trying to adapt to the Emissions Trading System (ETS), the EU has expanded the implementation mechanisms of the ETS. This system aims to set an upper limit on greenhouse gas emissions of emission-intensive sectors.

Studies and projects are ongoing on the Climate Law, which is the first law on climate change. This law aims to set out the basic principles and approach regarding climate law, to put the legal infrastructure of mitigation and adaptation targets and planning and implementation tools on a legal basis, to establish an emission trading system and to create incentives with climate finance.

In addition, on 1 October 2023, Turkey regulates a carbon emission tax at certain rates at the border based on the carbon content of iron and steel, cement, aluminium, fertiliser, electricity and hydrogen under the Border Carbon Adjustment Mechanism (CBAM). On 1 January 2026, Turkey plans to switch to CBAM in all sectors.

How Should Countries' Good Practice Examples Against Climate Change Be?

A triangle of energy, water and food needs to be formed for the sustainable utilisation of resources in the Eastern Mediterranean Region. All countries in the region have significant potential to mitigate climate change through an accelerated energy transition. The use of fossil resources needs to be phased out and rapidly shifted towards renewable energy sources.

In the Eastern Mediterranean Region, water is mostly used for agricultural activities. Agricultural irrigation affects water resources together with climate change, demographic and

socio-economic factors. Irrigation demand is expected to increase by 4% to 18% by 2100⁸. It is necessary to ensure adaptation activities for sustainable use of water, change agricultural practices, reduce food waste and ensure local production.

An example of a state-level project is the leading European Project of Common Interest (PCI), the EU "Electricity Motorway", which connects the national electricity grids of Israel, Cyprus and Greece with 1,208 km of undersea HVDC cables. This project aims to increase the security of energy supply, increase the share of renewable energy sources and reduce CO₂ emissions.

Another example is the Prosperity Project against climate change, involving the United Arab Emirates, Israel and Jordan. It was proposed to help address some of the challenges it poses to water and energy security in the Middle East and to promote renewable energy, sustainable water supply and stability in the region. The project will supply clean energy from Jordan to Israel and treated water from Israel to Jordan. With this regional cooperation, it is aimed to minimise the damages to the environment in water and energy issues against climate change by meeting the needs of both countries.

Another necessary issue that should be in good practice examples is climate finance. It is a type of financing obtained from public, private and alternative financing sources for mitigation of climate change impacts and support of adaptation actions⁹. At the COP27 held in Egypt in November 2022, a loss-damage fund mechanism was established to improve climate finance. With this mechanism, it was decided to provide finance to vulnerable countries due to the climate crisis and thus to pay compensation for losses and damages, especially for the devastations suffered by poor countries. However, it has not been determined who should pay into this fund, which countries can benefit from the fund and how much payment will be made. It should be aimed to determine the details of this climate finance mechanism and make it a good technical and practical example.

Opportunities and Challenges against Climate Change in the Eastern Mediterranean

It is critical to develop and implement policy recommendations to minimise the negative impacts of climate change such as increasing greenhouse gas emissions, temperature increases and natural disasters. For this purpose, Eastern Mediterranean countries need to cooperate both at the local and national level and meet on a common platform. With this collective effort, the methods to be followed for combating climate change can be determined by meeting on a common ground of civil society organisations, business world and society. The issues to be considered for this co-operation mechanism to be established are given below.

Policies against climate change should be holistic, not fragmentary. Climate change has a complex and intertwined relationship between sectors such as energy, transport, industry and agriculture. Therefore, the policies prepared or to be prepared should cover the interactions and connections between these sectors. Thus, while combating climate change, positive impacts can also be created in economic, social and environmental areas. Although Turkey has taken impressive steps in the path following so far on climate change, there are some deficiencies. For example, lack of coordination between authorities, the absence of a

⁸ MedECC (2020) Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report [Cramer, W., Guiot, J., Marini, K. (eds.)] Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France, 632pp, ISBN 978-2-9577416-0-1, doi: [10.5281/zenodo.4768833](https://zenodo.org/record/4768833).

⁹ <https://www.marmara.gov.tr/tr/iklim-finansmani-neden-onemli>.

climate finance strategy and the studies carried out without complementarity are the biggest problems. In order to avoid lack of coordination and communication in the cooperation mechanism to be established in the Eastern Mediterranean, central coordination boards can be established in each country and countries can be brought together at regular intervals.

A structural transformation is needed in the region to transition from fossil to renewable energy sources. This transformation should include radical changes in energy production, transport, industry, agriculture and other sectors. This requires reducing dependence on fossil fuel imports, increasing the use of renewable energy resources, ensuring energy efficiency, increasing the rate of electrification and accelerating this transition by using new technologies. In particular, although Turkey has set a net zero carbon emission target for 2053, it needs to clearly indicate the path it will follow politically. Most of the Eastern Mediterranean countries use fossil fuels as a source of electricity generation. With this co-operation mechanism, all countries in the region need to commit to and implement the efficient use of renewable energy sources.

To cope with climate change and minimise its impacts, countries need to have adequate infrastructure systems. Infrastructure investments generally require a long-term perspective because they must adapt to climate conditions and growth projections. Natural resources need to be utilised efficiently for water, energy and food sustainability. In almost all sectors, from transport to the building sector, countries need to adjust their agendas. Cities and settlements need to be resilient in order not to be damaged by natural disasters. Necessary devices and systems should be established to collect, analyse and monitor information on climate change and natural disasters. Earthquakes in Turkey and flood disasters in Libya show that adequate measures are not taken against climate change in the Eastern Mediterranean Region.

Climate finance should be established against climate change in the Eastern Mediterranean Region. Climate finance includes financial resources and financing instruments provided to support projects and initiatives needed to cope with climate change and mitigate its negative impacts. An approach based on international and regional cooperation, contributions from governments, international organisations and the private sector should be adopted to build climate finance in the region. Climate finance should be created to ensure green energy transition against climate change, sustainable use of water resources, agriculture and food security, vulnerable communities.

With regard to coal phase-out, it should be recognised that a just transition has socio-economic dimensions. Coal phase-out plans should take into account the views and needs of local communities, trade unions and civil society organisations. New job opportunities should be created for those working in the coal mining and power generation sectors. They should be offered appropriate training and skills development programmes to support their transition to other sectors. In addition, regions where coal mines are located are generally economically dependent on coal. Therefore, alternative economic opportunities should be created in these regions and regional development should be ensured.

Transforming the agricultural sector and making it resilient to climate change can prevent a possible food crisis for the region. The agricultural sector must take various measures to protect from the effects of climate change and take steps towards a sustainable future. One of these measures is to adopt sustainable agricultural methods based on water resources. Modern irrigation systems can increase water savings and enable more effective use of water resources. This can increase productivity even in regions at risk of drought. At the

same time, switching to organic farming practices is important in protecting soil health and maintaining ecosystem balance by reducing the use of chemical fertilizers and pesticides. Such practices, combined with diversified production systems, can create a more resilient and sustainable agricultural model. Additionally, using climate change-resistant seed varieties and training farmers on climate change-compatible agricultural practices can enable the agricultural sector to respond more effectively to future challenges.

Cities, which are responsible for 60-75% of energy use and 70% of greenhouse gas emissions and are the biggest perpetrators and victims of climate change, need to prepare for the future. Cities can play an important role in combating climate change. Cities can reduce their carbon footprint and support environmental sustainability through strategies such as sustainable urban planning and management, energy efficiency, green infrastructure projects, sustainable transportation systems and waste management. Energy consumption can be reduced by building houses that comply with green building standards, and traffic density and greenhouse gas emissions can be reduced by encouraging transportation alternatives such as public transportation systems and bicycle paths. Additionally, with urban green areas and water management projects, cities can increase biodiversity and use water resources sustainably by protecting natural ecosystems. Ensuring the participation of local people, organizing awareness campaigns and creating training programs can also enable cities to be effective in combating climate change. In this way, cities can not only reduce the effects of climate change, but also have a positive global impact by creating more resilient and sustainable communities.