

The World Bank Issue of Transatlantic Policy Quarterly

Türkiye is particularly vulnerable to the impacts of climate change. The frequency, intensity and impacts of climate-induced extreme events have increased in Türkiye in recent years – including flooding in coastal cities and low-lying river deltas (flooding affects around 600,000 people annually, on average) wildfires and weather events, such as storms, snowfall, and hail. Going forward, this trend is set to continue, which would lead to more recurrent heatwaves, greater drought and flood hazard, and sea-level rise. This has real implications for the country’s infrastructure and services, productivity, and the safety and health of its citizens. Climate risks compound existing seismic risks and add a level of complexity for response and recovery purposes, as was the case on 15 March 2023, when flooding from torrential rains hit the regions already affected by the devastating February 6th earthquakes. In addition, climate change poses significant risks to Türkiye’s water security. Türkiye faces being water scarce by 2030, with over two-thirds of the country’s 25 river basins at risk of severe water scarcity. Such impacts threaten agricultural productivity, rural incomes and employment, and food security. My colleagues at the World Bank estimate that a 10 percent reduction of water supply from climate change would cost Türkiye 6 percent of GDP or about US\$50 billion due to reduced agricultural output.

But the story is not only about the need to adapt to climate change. Even though Türkiye is only responsible for slightly above 1 percent of global greenhouse gas emissions, the country is the world’s 15th largest emitter. This exposes Türkiye to risks from the global low carbon transition. As countries take action to decarbonize their economies, demand will drop for emissions intensive goods. And this is not a hypothetical consideration: the expected impact of the European Union’s Green Deal for the Turkish economy has contributed to the urgency of the country’s climate change agenda (49 percent of Türkiye’s good exports go to the EU). Most recently, Russia’s invasion of Ukraine and attendant energy supply disruptions and price increases highlight risks for countries like Türkiye that rely on fossil fuel imports (Türkiye imports 99 percent of its gas and 93 percent of oil), underscoring the urgency of climate action in support of energy security and affordability.

In response to these challenges, Türkiye has made ambitious climate change commitments, joining the Paris Agreement in 2021 and committing to net zero emissions by 2053 as well as committing to implementing an emission trading system and installing 60GW of renewable energy by 2035. The country is establishing new institutional arrangements for climate change issues, including by forming the Ministry of Environment, Urbanization and Climate Change (MoEUCC), and for the first-time incorporating climate change and sustainability as core components of the

National Development Plan. These are steps in the right direction, though given the magnitude of the challenge the road ahead will be long.

The World Bank is supporting Türkiye to implement on this ambitious agenda. It is doing so by providing analysis and advice for the development of a robust policy framework that is critical for creating the necessary transition. It is also doing it by analyzing how, for example, the country can best expand the use of electric vehicles or design an emissions trading system. And more generally by working with the Government to support efforts aimed at incorporating climate change into the 12th National Development Plan.

Beyond technical assistance, we are also implementing projects focusing on adaptation to, for example, enhance forest fire management capacity to respond to the additional risks created by climate change. Indeed, as global warming increases, so does the frequency and intensity of weather conditions (hot, dry, and windy) conducive to wildfires and this is even more evident in countries which, like Türkiye, are part of the Mediterranean climate region making them particularly vulnerable to forest fires. These efforts will result in additional protection against wildfires to more than 6 million people and increase resilience in 7 million hectares of forest area. Also supporting climate change adaption, we have partnered with the Government of Türkiye to improve watershed collection, treatment and reuse, and to rehabilitate, construct and modernize irrigation systems. In this regard, we expect to contribute to the doubling of the volume of treated wastewater, and to provide almost 5000 users and more than 30 thousand hectares with new and/or improved irrigation systems.

And on the climate change mitigation front, we are aiming to increase the use of renewable energy through self-generation in public facilities and therefore will contribute to lower emissions and to public sector savings as it will reduce the need to buy energy. Indeed, we have a target to add more than 300 megawatts in public and municipal buildings therefore reducing the costs for the Government. And this is not all. We are already working on operations that will address flooding in the country, deal with the pollution in the Marmara Sea, introduce mechanism to finance firms interested in greening their productive infrastructure, and decarbonize transportation.

Going forward, Türkiye could reap significant benefits from climate action – both adaptation and mitigation – over the short and longer term, ranging from making the economy more resilient to climate impacts and global climate policy, as well as by unlocking opportunities from green products and technology upgrades, cleaner air and water, and cities where people can move, breathe and be productive. While significant investments are needed to build a low carbon, resilient economy, the World Bank estimates that tackling climate change will provide Türkiye with net economic benefits of \$146 billion over 2022-2040.

The summer edition of *Transatlantic Policy Quarterly* aims to contribute to the policy debate of how to address climate change in Türkiye. The World Bank released the *Türkiye Country Climate and Development Report* in 2022, which reflects about how Türkiye’s development goals can be achieved in the context of adapting to and mitigating against climate change. The articles included in this edition build on that report and investigate key issues that Türkiye will face as it undertakes the transition to a lower carbon and more resilient economy. They present: (i) an overview of key actions related to climate change and their impact on Türkiye’s economy and people; (ii) reflect about how to adapt to a changing climate and building the resilience to its worst impacts, including how to prepare for a future with less water and how to improve the resilience of infrastructure to natural disasters; (iii) discuss key challenges associated to the decarbonization the Turkish economy; and (iv) argue how to meet these challenges in a way that supports sustainable growth and a just transition for people and communities.

I am sure you will enjoy this edition of *Transatlantic Policy Quarterly* which reflects the hard work and knowledge of my colleagues at the World Bank who have prepared the included articles. I also want to encourage you to continue engaging in the climate change agenda in Türkiye.

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