

Press release

Türkiye's fossil fuel burning linked to thousands of annual air pollution deaths, billions in economic losses in five neighbouring countries

Israel, Egypt, Greece, Iraq, and Syria each pay billions in USD in health costs for PM_{2.5} from Türkiye's land-based fossil emissions.

ISTANBUL, 22 October 2026 - As Türkiye prepares to host the COP31 conference this November, its reliance on fossil fuels is generating massive air pollution health costs both within the country and throughout the Eastern Mediterranean. A landmark report from the [Centre for Research on Energy and Clean Air \(CREA\)](#) and the [Right to Clean Air Platform \(THHP\)](#) reveals the scale of this burden.

The research finds that fossil fuels—including coal, oil and gas—account for 52% of PM_{2.5} air pollution in Türkiye. The health impacts of this pollution are estimated to cost the Turkish economy approximately USD 55 billion each year, equivalent to 4.1% of national GDP in 2024. The annual economic cost of fossil fuel pollution is approximately 2.5 times the Ministry of Health's entire 2024 budget.

Fossil fuel air pollution is also responsible for roughly 26,500 deaths per year in the country, including deaths from cardiovascular and respiratory diseases, lung cancer, stroke, and diabetes.

Beyond the estimated deaths each year in Türkiye, air pollution from the country's fossil fuel emissions also contributes to deaths and economic losses in neighbouring countries. In 2024, these emissions were estimated to cause: 3,200 deaths and USD 2.1 billion in economic burden in Egypt; 1,700 deaths and USD 0.2 billion in economic burden in Syria; 800 deaths and USD 0.8 billion in economic burden in Iraq; 500 deaths and USD 4.5 billion in economic burden in Israel; and 400 deaths and USD 1.5 billion in economic burden in Greece.

Türkiye currently has no national ambient air-quality standard for PM_{2.5}, despite the substantial health burden associated with exposure to the pollutant.

Türkiye's fossil fuel reliance is exponentially increasing its economic burden. The country depends heavily on imported fossil fuels, leaving it [exposed to international price shocks](#). Its energy import bill rose [33.8%](#) year on year in August 2026 amid the Hormuz crisis, according to data released by the Turkish Statistical Institute.

PM_{2.5} pollution also affects workers' health and labour productivity. The report highlights that it causes approximately 8.5 million sick leave days each year in Türkiye.

Meanwhile, with the EU as Türkiye's largest trading partner, Turkish exporters in carbon-intensive sectors face additional costs under the EU's Carbon Border Adjustment Mechanism (CBAM). Fossil fuels are also the largest source of carbon emissions.

According to 2024 data, coal accounts for 35% of Türkiye's electricity generation and natural gas for 19%. Diesel accounts for 66% of the energy consumed in road transport, followed by LPG at 17% and petrol at 16%. Electricity accounts for just 0.2%. In industry, fossil fuels represent approximately 60% of Türkiye's final energy consumption.

'Our research finds that Türkiye's fossil-fuel pollution does not stop at national borders. Its land-based fossil emissions contribute to thousands of deaths and billions in economic losses in both West Asia and Europe. Behind these numbers are people and families living with the consequences of polluted air. As COP31 nears, Türkiye has an opportunity to demonstrate climate leadership through more than words by committing to reducing fossil reliance for the physical and economic health of the region,' said Vera Tattari, Analyst at CREA and lead author of the report.

Türkiye is [facing mounting criticism](#) for hosting the COP31 climate conference while still embracing coal—a recent [350.org report](#) noted the country was Europe's biggest coal-power generator and had signalled it could expand its coal and gas power capacity by around 30% by 2035. Led by THHP, 74 organisations worldwide have issued a [joint call](#) to the COP31 Presidency to place health at the centre of the Action Agenda and recognise fossil fuels as health-harming products.

'Türkiye can reduce the health and economic burden of fossil fuels by developing and implementing a roadmap to phase them out. The first concrete step should be to stop permitting new coal-fired power capacity, including expansion projects at the Afşin Elbistan A and Cenal power plants. The second urgent step should be to close existing plants as soon as possible under a just transition plan that safeguards the economic, social and health rights of workers and local communities. This is also essential to addressing the climate crisis. As COP31 President and Minister of Environment, Urbanisation and Climate Change Murat Kurum recently stated, we need to "transition away from fossil fuels in a just, orderly, and equitable manner"; said Deniz Gümüşel, Coordinator of THHP.

'The adverse health impacts of PM_{2.5} exposure begin in the womb and also affect infants. Each year, an estimated 8,000 preterm births, 8,200 low-birthweight infants, 5,100 new cases of childhood asthma, and 6,500 emergency-room visits for asthma in Türkiye are attributed to air pollution,' said Prof. Dr. Çiğdem Çağlayan, public health specialist and THHP Executive Committee Member.

‘Fossil fuels are one of the five commercial determinants of health identified by the World Health Organization (WHO). They should therefore be treated as a public health issue, like tobacco and other harmful products, and recognised as health-harming products. Their impacts on human health and the economic costs they cause demand urgent action. Governments should end subsidies to fossil fuel companies and implement concrete, effective policies that protect public health and reduce reliance on fossil fuels,’ she added.

‘Assuming the presidency and hosting the summit gives Türkiye a responsibility to provide direction on climate action and advance its own climate policies. Achieving the target of increasing electricity’s share of global final energy consumption to 35% by 2035 requires a greater share of renewable energy and a reduction in fossil fuel use,’ said Ümit Şahin, Climate Change Studies Coordinator at Sabancı University’s Istanbul Policy Center.

He added that geopolitical crises had heightened expectations of COP31 as one of the world’s most important climate summits.

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Notes to editors

The report related to this press release is available [here](#).

All CREA publications can be found here:

energyandcleanair.org/publications



About CREA

The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions, to air pollution. CREA was founded in December 2019 in Helsinki and has staff in several Asian and European countries. The organisation's work is funded through philanthropic grants and revenue from commissioned research.

www.energyandcleanair.org

About THHP

The Right to Clean Air Platform (THHP) is an initiative that unites professional health associations and civil society organisations focused on environmental issues, nature conservation, and climate change. Established in 2015, THHP aims to reduce air pollution, protect public health, and ensure the recognition of clean air as a fundamental human right. Through research, advocacy, and effective public communication, the Platform promotes climate, energy, and environmental policies that prioritise health and supports a fair transition away from fossil fuels.

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