

THE COST OF MOBILITY: ADDRESSING SOCIAL EQUITY IN TURKEY’S ROAD TRANSPORT TRANSFORMATION

Johanna Wietschel

Executive Summary

This policy brief provides an overview of the differences in expenditure patterns in road transportation among households in Turkey. Such an understanding is essential—especially in challenging economic times—for designing targeted fiscal and income policies that address transportation poverty and equity concerns while pursuing climate goals. Price trends, mobility behavior, vehicle features, and the spending structure of private households are examined to provide an overview of the costs of mobility on Turkey’s roads—from both an individual and societal perspective. Given the country’s diverse socioeconomic landscape, decarbonization policies have varying financial impacts on different population groups. The approach used in this study seeks to inform the development of equitable and effective policies that balance environmental and social priorities. Furthermore, this policy brief forms a basis for assessing the impact of political decarbonization instruments in the passenger road transportation sector on various income groups and thus aims to support political decision-makers in choosing socially balanced decarbonization instruments.



Introduction

Turkey ratified the Paris Agreement in October 2021 and set 2053 as its target year for achieving net-zero greenhouse gas emissions.¹ Decarbonization efforts to reach this target will require comprehensive strategies and policy measures across critical sectors, including energy production, industry, buildings, waste, agriculture, land use, land-use change, and forestry (LULUCF) and transportation as described in the Turkish Climate Change Mitigation Strategy and Action Plan 2024–2030.² Among these sectors, the transportation sector is the third most energy-consuming sector after buildings and the industrial sector in Turkey and has the highest reliance on fossil fuels. Over 90 percent of transport sector emissions originate from road transportation. Road transportation in Turkey today emits approximately 80 million tons of greenhouse gases annually, accounting for about 20% of Turkey's carbon dioxide (CO₂) emissions.³

The focus of this research is on passenger road transportation. While introducing and expanding political pricing instruments in the passenger road transportation sector is a climate-effective approach to reducing emissions, those instruments are often met with the greatest resistance from the public and directly impact household incomes. These instruments are often projected to increase the costs of operating conventional vehicles powered by fossil fuels. This raises concerns about social equity, particularly for households that depend on cars and already face constraints in other areas of consumption.

This analysis explores the structural characteristics and key dynamics of Turkey's transportation sector by examining pricing trends, mobility patterns, vehicle attributes, and the expenditure structure of private households. Building on this

analysis, it introduces core emissions reduction strategies and develops initial policy recommendations for balancing climate ambitions with social equity in the context of Turkish transportation policy.

Sectoral Background: Core Dynamics Shaping Turkey's Transportation System

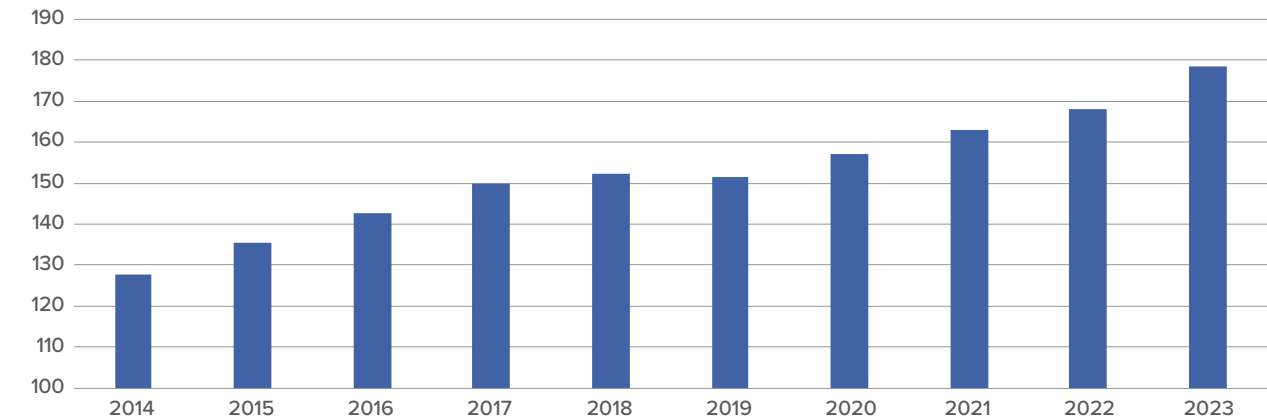
A significant increase in the number of registered vehicles in Turkey—particularly private cars—reflects both growing mobility demand and changing consumer behavior. At the same time, there is a general trend in recent years toward purchasing smaller cars. Compared internationally, mobility constitutes a substantial share of household expenditure in Turkey. High-income groups, in particular, allocate nearly one-third of their consumption spending to transport, demonstrating a pronounced willingness to pay for private car use. These developments provide important context for understanding the structural conditions of Turkey's transportation sector and inform the design of future transport policies.

A GROWING NUMBER OF CARS AND A TREND TOWARD SMALLER CARS

The number of registered cars in Turkey increased significantly in the last decade, from approximately 10 million in 2014 to more than 15 million in 2023—a growth of about 55%.⁴ During the same period, the Turkish population grew by roughly 10%.⁵ This highlights a notable rise in vehicle ownership. In 2023, there were nearly 178 cars per 1,000 inhabitants, compared to 128 in 2014 (Figure 1). Today, about 20% of the population in Turkey owns a car.⁶



Figure 1: Cars per 1,000 Inhabitants

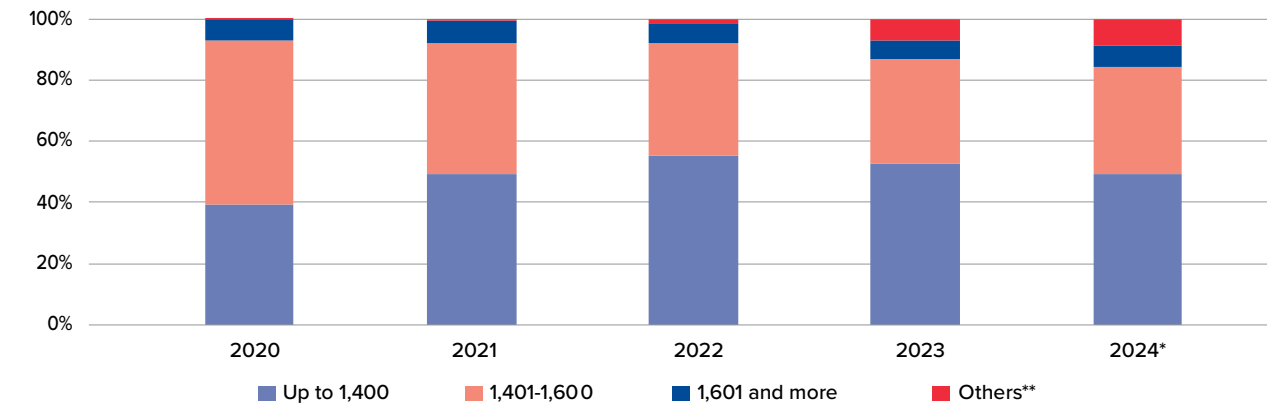


Source: Turkish Statistical Institute (2024)⁷; World Bank (2023)⁸

Generally, there is a trend toward buying smaller cars in Turkey. Registered cars in the category of small-engine vehicles with engines up to 1,400 cm³ made up around 40% of all vehicles in 2020 and 50% in 2024 (see Figure 2). This indicates a consumer preference for smaller-engine vehicles, likely driven by their affordability, fuel efficiency, and lower taxes in Turkey. Vehicle taxes in Turkey,

particularly the Special Consumption Tax (SCT) on new passenger cars, are among the highest in Europe and encourage consumers to select smaller vehicles. The share for medium-engine vehicles decreased from 55% to 35% during the same period, the share for the large engine categories (1,601 cm³ and above) remained stable over the years at around 7%.

Figure 2: Distribution of Registered Cars by Engine Size



Source: Turkish Statistical Institute (2024)⁹

Note: *2024 data is from the end of October. ** The category "Others" includes cars for which the engine size field in the license is either filled in incorrectly or left blank, as well as electric cars.

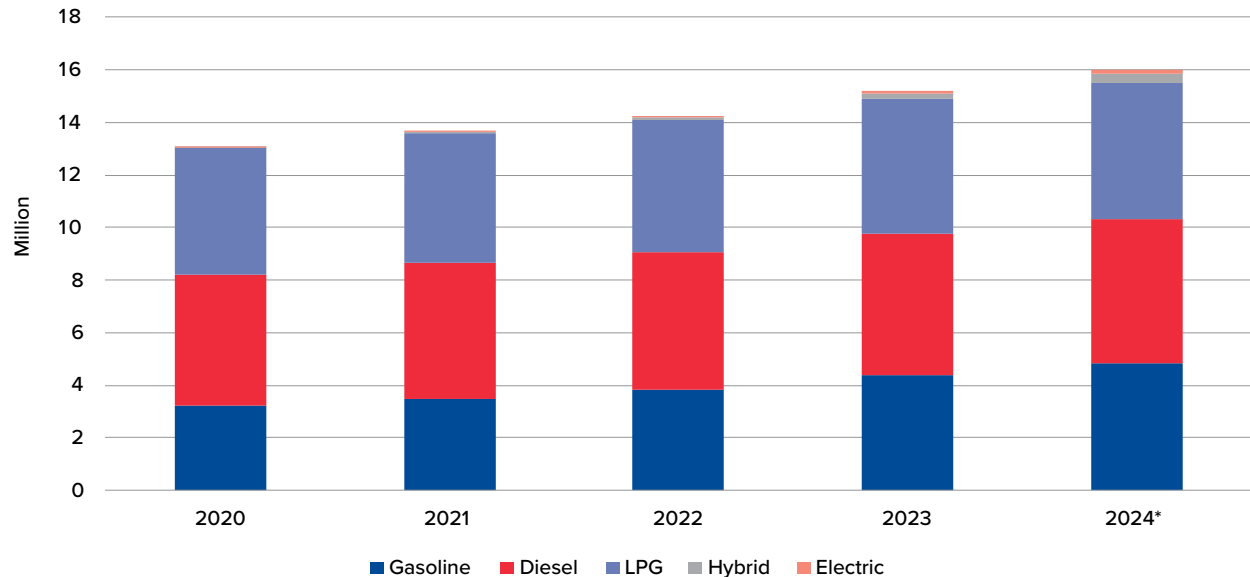


SIGNIFICANT GROWTH IN ELECTRIC CARS

As of October 2024, battery electric cars (BEV) accounted for 1% (153,772) of all registered cars in Turkey (see Figure 3). Between 2022 and 2024, the share of electric cars in Turkey has grown tenfold, increasing from 0.1% to 1%. This significant growth highlights the accelerating adoption of electric vehicle technology in the country. Looking only at the January to October 2024 period, approximately 800,000 cars were newly registered, with full and plug-in hybrid cars making up 15.2% and electric cars representing 9% of the new registrations in that period.¹⁰

The growth in electric vehicles can be partly attributed to the tax system, which financially favors electric vehicles at registration. Figure 4 illustrates the minimum and maximum Special Consumption Tax (SCT) rates for cars across three categories: internal combustion engine vehicles (ICEs), hybrid vehicles, and electric vehicles (EVs). For electric vehicles with the lowest motor power, the SCT ranges from 10% to 40% of the net purchase price, depending on the pre-tax sales price. In contrast, for ICEs with the lowest cylinder volume, the SCT ranges from 45% to 80%, potentially double the tax rate applied to electric vehicles. In the category of larger cars, with higher motor power or cylinder volume, the SCT on internal combustion engine vehicles reaches up to 220%, nearly four times higher than the SCT on electric vehicles, which is between 50% and 60%.

Figure 3: Distribution of Registered Cars According to Fuel Type

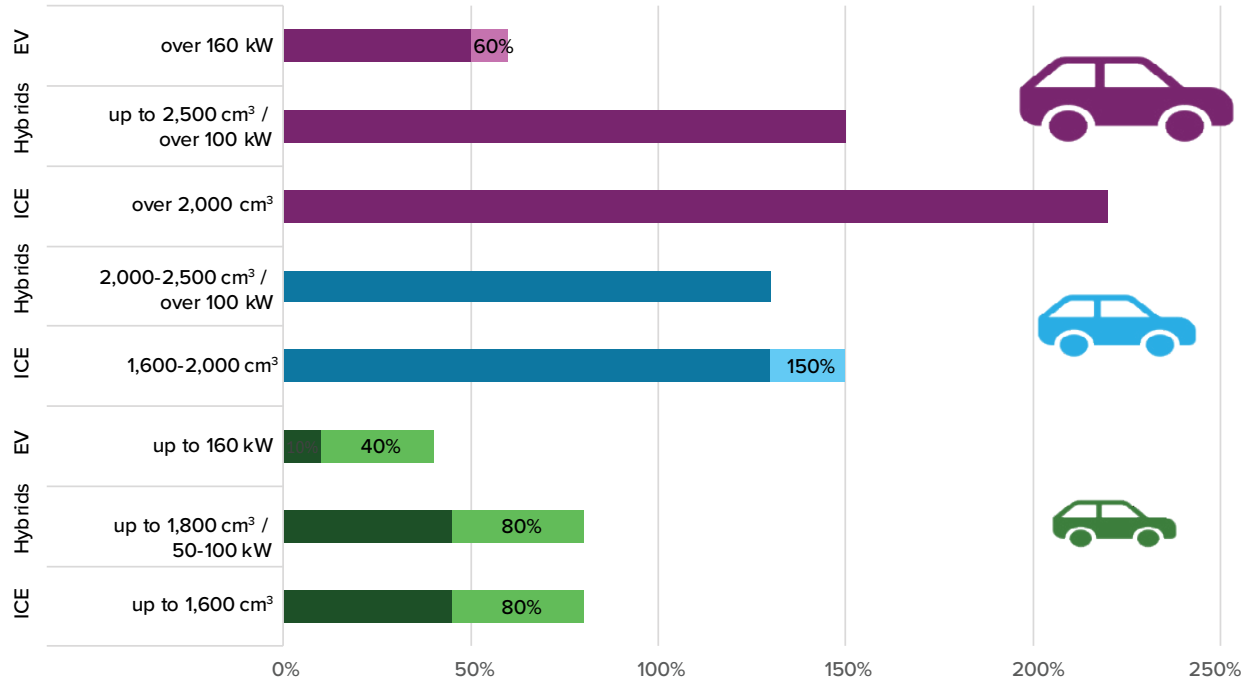


Source: Turkish Statistical Institute (2024)¹¹

Note: *Data for 2024 is from the end of October.



Figure 4: Minimum and Maximum Special Consumption Tax (in % of a Car's Net Purchase Price)



Source: T.C. Resmi Gazete (2002),¹² T.C. Resmi Gazete (2022),¹³ and HDI Sigorta (2024)¹⁴

Note: The specific SCT amount depends on the car's cylinder volume (for ICEs), the cylinder volume and the motor power (for hybrids), or the motor power (for EVs) and on the pre-tax car sales price.

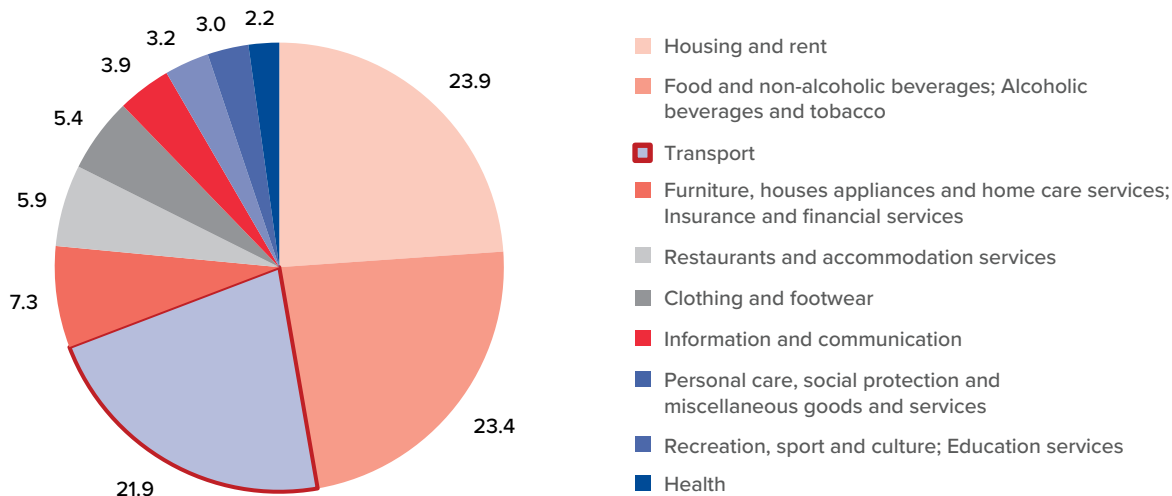
MOBILITY EXPENSES AS A NOTABLE SHARE OF HOUSEHOLD BUDGETS

Transportation-related expenses represent a significant portion of household budgets in Turkey. On average, households in Turkey allocated 21.9% of their consumption expenditures to transportation in 2023 (see Figure 5). In 2013, the share spent for transportation was 17.4%.¹⁵

Over the past decade, roughly one in five lira of consumption expenditures in Turkey was spent on transportation, which is quite high when compared internationally. In Germany, the share of private household consumption expenditures allocated to transportation has consistently ranged between 12% and 13% across all income groups in recent years.¹⁶ In the EU, this share was 12.8% in 2023.¹⁷



Figure 5: Consumption Expenditures of Private Households in Turkey in 2023 (in %)

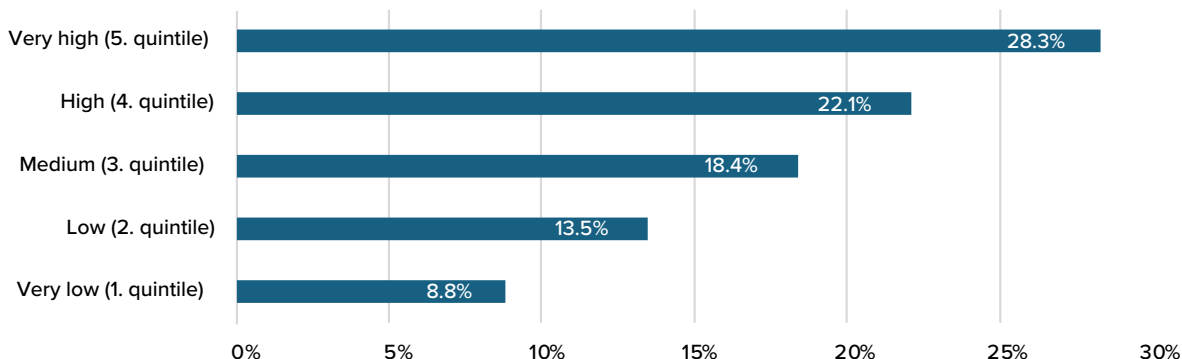


Source: Turkish Statistical Institute (2024)¹⁸

A significant disparity exists between income groups in their transportation expenditures (see Figure 6). Households in the lowest income quintile spent 9% of their consumption expenditures on transportation, while those in the highest quintile allocated 28%. For comparison, in Germany, the lowest income quintile spent around 5% and the highest around 15% of their household income on transportation—roughly half the proportion observed in Turkey.¹⁹ In 2023, the estimated

monthly average consumption expenditure in general per household was TRY 12,159 (around EUR 380 using an exchange rate of TRY 32 per EUR 1, as of end of 2023), equating to TRY 6,259 (EUR 196) per equivalent person.²⁰ The disparity in transportation spending between income groups could be attributed to two primary factors: Either higher-income groups travel significantly more, or their travel methods are considerably more expensive. Likely, it is a combination of both.

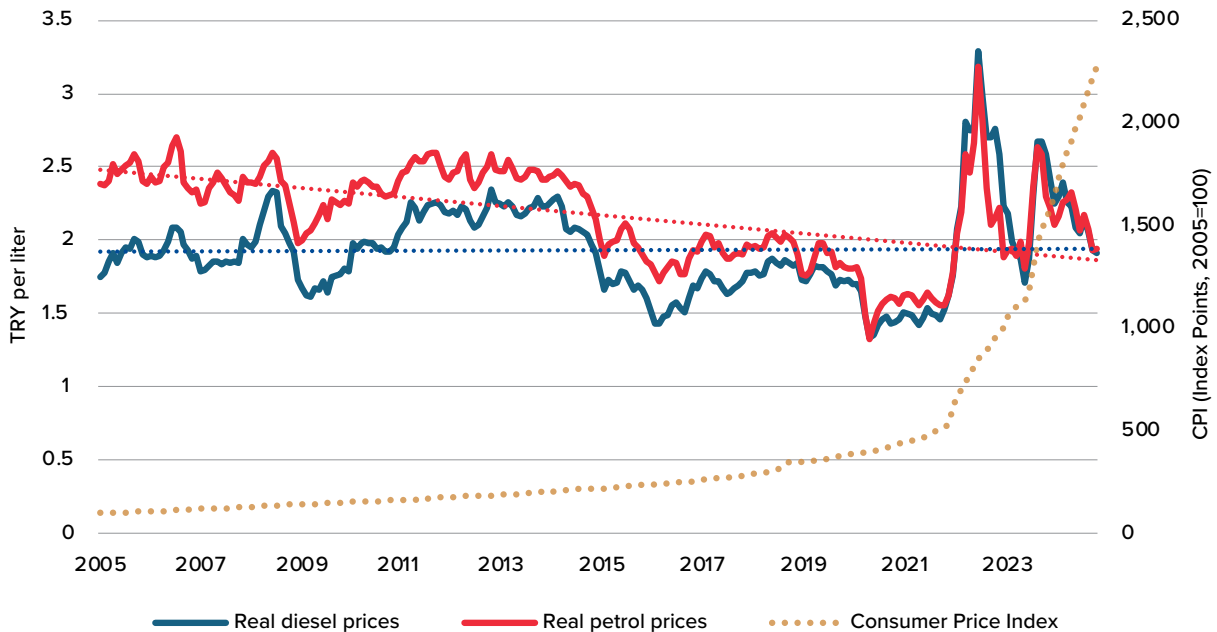
Figure 6: Transportation Expenditures by Income Group in 2023 (as % of Total Consumption Expenditures)



Source: Turkish Statistical Institute (2024)²¹



Figure 7: Development of Real Fuel Prices Using Consumer Price Index



Source: Analysis and compilation by the author based on data from the Turkish Statistical Institute (2024)²²

Note: The consumer price index is used to calculate the real prices that reflect purchasing power relative to the year 2005 and account for inflation in the subsequent years.

Fuel prices are one of the key factors influencing transportation expenditures. Looking back over the past two decades, real fuel prices show some fluctuations but appear to have remained stable overall. Figure 7 illustrates the development of real fuel prices, adjusted for inflation. Real prices are calculated using the consumer price index (CPI) with 2005 as the base year, reflecting price changes relative to this year and accounting for inflation in the following years. The real price of diesel today is roughly the same as it was in 2005, showing a relatively stable trend over the past two decades, with occasional fluctuations, especially a strong rise in 2022. The real price of petrol also shows fluctuations but has overall declined slightly since 2005.

The consumer price index shows a sharp increase around the 2020s, reflecting a rapid rise in prices and indicating significant inflation during this period. Turkey's economy in general in recent years has been marked by inflation, currency instability, and a decline in purchasing power. As a result, the cost of living has surged: basic goods, services, and energy prices have risen steeply, placing a significant financial burden on low- and middle-income households. This challenging economic environment has ripple effects, straining both businesses and individuals across the country.



Advancing Emissions Reduction Strategies in Turkey's Transportation Sector

Transforming the transportation sector is a cornerstone of any credible climate strategy. Public awareness of the climate crisis in Turkey is high: 72% of the population is concerned or very concerned about climate change, and nine out of ten people believe that Turkey should commit to a net-zero CO₂ emissions target.²³

Turkey has taken important steps toward climate action, and its Climate Change Mitigation Strategy and Action Plan²⁴ outlines key measures to reduce emissions from the transportation sector. These include shifting more freight and passenger traffic to maritime and rail transport, increasing overall efficiency by promoting public transportation, improving the efficiency of both private and shared mobility, encouraging the use of next-generation low- and zero-emission vehicles, integrating sustainable and clean energy sources into transport systems, and expanding the use of electrification and alternative fuels.

On the global level, the International Energy Agency (IEA) identifies key priorities for decarbonizing the transport sector, offering universally applicable guidance.²⁵ These recommendations—particularly advancing fuel economy and accelerating the transition to electric vehicles—are essential for aligning Turkey's transportation sector with net-zero goals. As Turkey continues to shape its transportation and climate policy, these universally applicable and essential measures for achieving a low-emission transportation sector should serve as a strategic reference. These measures and their potential application in Turkey will be referenced below.

REFORMING FOSSIL FUEL SUBSIDIES AND FUEL TAX POLICY

In Turkey, there is a significant gap between the actual environmental costs and the implicit pricing mechanism in place. If the existing fuel taxes in the country are considered a form of implicit carbon pricing, the rate in 2023 stands at TRY 265 (EUR 8) per ton of CO₂ equivalent.²⁶ Turkey does not currently impose an explicit carbon price, and the current fuel taxes primarily serve to generate government revenue rather than function as a dedicated climate protection tool. Closing the gap between the true cost of climate impacts and the price of emissions could play a crucial role in incentivizing a more sustainable transition and supporting the necessary development in the transportation sector.

Removing fossil fuel incentives and increasing fuel taxation is a key priority in the IEA's strategy. These measures are aimed at making fossil fuels financially less attractive. One approach is carbon pricing, which targets the cost of carbon emissions and indirectly raises the price of fossil fuels to encourage cleaner alternatives. Estimates by the German Environment Agency suggest that the cost of climate damage through physical damages, health expenses, or economic losses in Turkey ranges between TRY 7,215 and TRY 25,000.²⁷ This corresponds to approximately EUR 195 to EUR 676 (based on an exchange rate of TRY 37 per EUR as of November 2024). However, current carbon pricing mechanisms not only in Turkey but worldwide often fail to fully reflect these extensive costs.

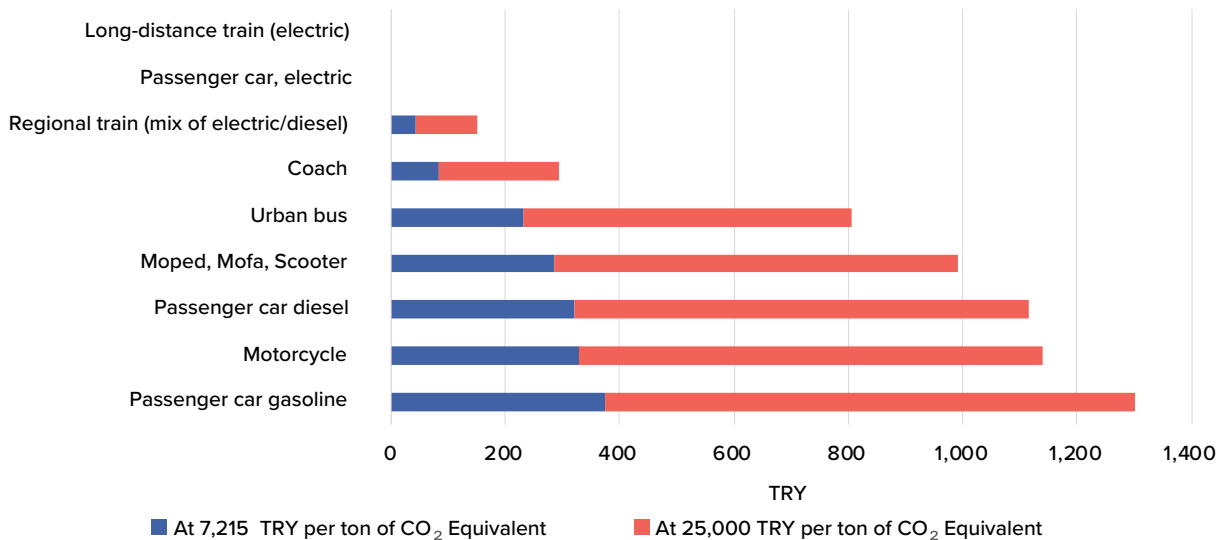
Figure 8 shows the climate damage costs of vehicle emissions in Turkey, measured per passenger kilometer based on internationally recognized cost rates published by the German Environment Agency. As seen in the figure, conventional



passenger vehicles in Turkey remain major contributors to CO₂ emissions and their associated costs, with costs up to TRY 1,300 (EUR 35) per 100 passenger kilometers using the suggested climate damage cost rate at TRY 25,000 (EUR 676) per ton of CO₂ equivalent. Therefore, as Turkey is preparing to launch a national Emissions Trading System (ETS), with a pilot phase beginning next year and full implementation from 2027 to 2034,²⁸ these costs are an important policy consideration. However, while the Turkish ETS aims to incentivize cleaner industrial technologies and accelerate the transition to renewable energy, it is not planned to extend to the transport sector at this stage.

In Turkey, vehicle taxation—especially the SCT applied to new passenger cars—is relatively high and linked to engine power. However, the current SCT system does not consider CO₂ emissions. An alternative SCT system could include a CO₂ component, encouraging consumers even more to select lower-emission vehicles.³¹ The potential impact of a CO₂-based SCT is significant, with an estimated reduction of 1.5 gram per kilometer in fleet-wide CO₂ emissions, translating to 113,000 tons of CO₂ saved annually, as well as significant fuel savings. The long-term benefits could include further emissions reductions and economic growth, especially for Turkey's automotive industry.

Figure 8: Cost of Climate Damages from Vehicle Operation Emissions per 100 Passenger Kilometers (in TRY)



Source: German Environment Agency (2020)²⁹

Note: The graph compares two cost scenarios. Prioritizing current generations (blue) results in climate damage costs of TRY 7,215 (EUR 195) per ton of CO₂, while treating current and future generations equally (orange) raises the cost to TRY 25,000 (EUR 676). The higher cost reflects the greater weight given to long-term climate impacts. Using an exchange rate of approximately TRY 37 per EUR, as of November 28, 2024.³⁰



ADVANCING FUEL ECONOMY STANDARDS AND ZERO-EMISSION MANDATES

As car ownership continues to rise in Turkey, promoting the transition to electric vehicles becomes increasingly important. According to the SHURA Energy Transformation Center's net-zero emissions pathway, more than 25 million passenger vehicles are expected to be on the Turkish streets by 2030. To align with national decarbonization targets, 44% (11 million) of these vehicles will need to be plug-in hybrid or battery-electric models—up from just 3% (approximately 600,000 vehicles) at the end of 2024.³² With nearly half of all cars in operation by 2030 expected to be electric, Turkey could see a reduction of 20 million tons of CO₂ emissions—equivalent to a 41% decrease in emissions from the passenger car sector.³³

In this regard, the IEA's second key strategy focuses on expanding and strengthening fuel economy standards, zero-emission vehicle (ZEV) sales mandates, and/or phase-out dates for internal combustion engine (ICE) vehicles. Fuel economy standards set limits on the average fuel consumption or CO₂ emissions of a manufacturer's vehicle fleet. ZEV sales mandates, in turn, require manufacturers to ensure that a certain share of their vehicle sales produce no tailpipe emissions.³⁴ As Turkey has already committed to increasing the number of low-/zero-emission vehicles in its public vehicle fleets in its climate strategy, it should consider similar targets regarding the private fleet.

PROMOTING SMALLER AND MORE EFFICIENT VEHICLES

As previously outlined, there is a growing trend toward the purchase of smaller vehicles in Turkey. The third core IEA strategy for climate protection in the transportation sector focuses on incentivizing the lightweighting and right-sizing of the car fleet. Lightweighting refers to reducing vehicle weight by using lighter materials (e.g., aluminum, carbon fiber, or advanced plastics) to improve fuel efficiency and extend the range in case of electric vehicles. Right-sizing of car fleet means smaller, more efficient cars.

Transitioning to lighter and more compact vehicles is essential for aligning Turkey's transportation sector with the net-zero pathway. Reducing vehicle size and weight improves fuel efficiency, extends the range of electric vehicles, and contributes to lower energy consumption and emissions overall. Turkey can support this shift by strengthening targeted taxes like an emissions-based SCT and regulatory measures that discourage the purchase and use of large, heavy vehicles. In parallel, the automotive industry should be incentivized to expand the production of smaller and mid-sized models, particularly given that profit margins in this segment tend to be lower.

As the strategies outlined above focus on achieving a low-emissions transportation sector, the following section will analyze how these climate targets can be harmonized with social priorities in the Turkish transportation sector and balanced through political instruments.



Policy Recommendations: Balancing Climate Ambitions and Social Equity in Transportation Policy

In Turkey, passenger road transportation remains a key contributor to emissions, especially as car ownership continues to grow rapidly. Political pricing instruments, such as fuel taxes and carbon pricing, are among the most effective tools for steering this transformation. However, these same instruments can pose significant financial burdens on households, especially in a context where transportation-related expenses already represent a large share of household budgets. Striking the right balance between climate ambition and social equity is therefore crucial.

Mobility poverty refers to situations in which individuals face restricted access to mobility due to financial barriers (affordability), limited access to key destinations (accessibility), insufficient transport options (availability), or excessive travel times that reduce time for rest and social life (time poverty).³⁵ Equitable and accessible transportation systems are fundamental for ensuring that all residents can access opportunities and exercise their rights. To achieve this, Turkey's political measures must be accompanied by socially balanced implementation strategies like targeted support for low-income households, investments in accessible public transport, and inclusive policies that avoid reinforcing existing mobility inequalities.

To ensure broad public acceptance, putting a price on fossil fuels like in an emissions trading system must include a strong social component. As fossil fuel prices rise, mechanisms for revenue redistribution are essential. One effective approach is direct lump-sum compensation, where revenues from carbon pricing are redistributed to households based on their income levels and, potentially, access to public transportation—resulting in

higher compensation for those more dependent on car use due to limited or no public transportation availability.

Further instruments can reinforce social fairness. For example, revenues from emissions-based vehicle registration taxes could be used to subsidize the purchase or leasing of zero-emission vehicles for lower-income households. This would effectively create a bonus-malus system—penalizing high-emission vehicles and rewarding climate-friendly choices—while remaining fiscally neutral. In addition, social leasing programs funded or co-funded by the state can provide electric vehicles at affordable monthly rates, targeted at vulnerable groups. Eligibility could be based not only on income but also on geographic or social factors—such as limited access to public transportation or household reliance on a single vehicle.

Transitioning to lighter and more compact vehicles is not only key for aligning the transportation sector with the net-zero pathway but also for lowering ownership costs and broadening access to electromobility. Public support should therefore focus on accelerating the development and adoption of compact, efficient, and affordable electric vehicles. This aligns with the trend toward smaller engine cars and the rapid growth of the electric vehicle market.

Policy design must also account for differing behavioral responses across income groups. While lower-income households tend to be more price-sensitive and vulnerable to rising fuel costs, higher-income groups in Turkey demonstrate lower price elasticity and greater willingness to pay for transportation. For the latter, financial incentives alone may not suffice; non-financial factors such as convenience, time savings, and infrastructure quality may play a larger role. To shift



mobility behavior among higher-income groups, policymakers should invest in reliable public transportation, safe infrastructure for walking and cycling, and integrated mobility services to reduce dependence on car ownership.

Conclusion: The Transport Transformation as a Core Social Policy

By focusing on affordability, accessibility, and inclusive design, Turkey can ensure that its transport transition is both environmentally effective and socially fair. Political pricing instruments like carbon pricing and fuel taxation are powerful tools for emissions reduction and must be embedded within a broader framework that ensures fairness, inclusion, and public trust. A well-integrated, multimodal transportation system offers the most sustainable alternative to private car use. Policy options such as revenue recycling, social leasing schemes, and emissions-based taxation with targeted compensation provide practical ways to align climate goals with social equity in private car use.

To ensure the right to mobility, policy instruments must be assessed for their distributional effects. This requires long-term, reliable data on mobility patterns—linked to income and differentiated by socioeconomic and regional factors. This requires connecting income data with information on the following points: How often and for what purpose are people on the move? Which means of transportation do they use? What distances are covered, and how long are people on the move? A fiscal framework for taxes and levies built on this foundation can enable a broad, socially supported transformation.



Notes

- 1 | “Republic of Türkiye: Updated First National-ly Determined Contribution,” Government of the Republic of Türkiye, April 13, 2023, https://unfccc.int/sites/default/files/NDC/2023-04/T%C3%9CRK%C4%B0YE_UPDATED%201st%20NDC_EN.pdf.
- 2 | “Climate Change Mitigation Strategy and Action Plan 2024-2030,” Directorate of Climate Change, Republic of Türkiye, January 1, 2024, https://iklim.gov.tr/db/english/icerikler/files/CLIMATE%20CHANGE%20MITIGATION%20STRATEGY%20AND%20ACTION%20PLAN%20_EN.pdf.
- 3 | “NDC Transport Tracker Türkiye,” Changing Transport, accessed January 28, 2025, https://changing-transport.org/ndc_country/tuerkiye/; Ahmet Acar, Hasan Aksoy, Ayda Shaker, Saeed Teimourzadeh, Osman Bülent Tör and Julia Hildermeier, “Transportation Sector Transformation: Integrating Electric Vehicles into Türkiye’s Distribution Grids,” SHURA Energy Transition Center, July 10, 2024, https://shura.org.tr/wp-content/uploads/2024/07/Transportation-Sector-Transformation_Integrating-Electric-Vehicles-into-Turkiyes-Distribution-Grids.pdf.
- 4 | “Number of Road Motor Vehicles,” Turkish Statistical Institute, December 2024, accessed January 28, 2025, <https://data.tuik.gov.tr/Bulten/Index?p=Road-Motor-Vehicles-December-2024-53463>.
- 5 | “World Development Indicators Türkiye,” World Bank Group, accessed January 29, 2025, <https://databank.worldbank.org/reports.aspx?source=2&country=TUR>.
- 6 | “Number of Road Motor Vehicles,” Turkish Statistical Institute.
- 7 | Ibid.
- 8 | “World Development Indicators Türkiye,” World Bank Group, accessed January 29, 2025, <https://databank.worldbank.org/reports.aspx?source=2&country=TUR>.
- 9 | “Number of Road Motor Vehicles,” Turkish Statistical Institute.
- 10 | Ibid.
- 11 | Ibid.
- 12 | T.C. Resmi Gazete, “Özel Tüketim Vergisi Kanunu,” T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, June 12, 2002, no. 24783, <https://www.mevzuat.gov.tr/mevzuat?Mevzuat-No=4760&MevzuatTur=1&MevzuatTertip=5>.
- 13 | T.C. Resmi Gazete, “Cumhurbaşkanı Kararı - Özel Tüketim Vergisi Kanunu,” T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, November 21, 2022, no. 32023/6417, <https://www.resmigazete.gov.tr/eskiler/2022/11/20221124-2.pdf>.
- 14 | “Araç ÖTV ve KDV Hesaplama,” HDİ Sigorta, last accessed January 29, 2025, <https://www.hdisigorta.com.tr/hesaplayicilar/otv-kdv-hesaplama>.
- 15 | “Household Consumption Expenditures,” Turkish Statistical Institute, June 2023, accessed January 28, 2025, <https://data.tuik.gov.tr/Bulten/Index?p=Household-Consumption-Expenditures-2023-53801&dil=2>.
- 16 | Statistisches Bundesamt (Destatis), “Laufende Wirtschaftsrechnungen—Einkommen, Einnahmen und Ausgaben privater Haushalte 2021,” *Wirtschaftsrechnungen Fachserie* 15, no. 1, December 20, 2022, <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/Einkommen-Einnahmen-Ausgaben/Publikationen/Downloads-Einkommen/einnahmen-aus->



- gaben-privater-haushalte-2150100217004.pdf?__blob=publicationFile.
- 17 | "Household Consumption by Purpose," Eurostat, November 27, 2024, accessed January 29, 2025, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Household_consumption_by_purpose.
 - 18 | "Household Consumption Expenditures," Turkish Statistical Institute, June 2023, accessed January 28, 2025, <https://data.tuik.gov.tr/Bulten/Index?p=Household-Consumption-Expenditures-2023-53801&dil=2>.
 - 19 | "Household Consumption Expenditures by Monthly Net Household Income," Federal Statistical Office of Germany (Destatis), last updated November 28, 2023, accessed July 13, 2025, <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/Konsumausgaben-Lebenshaltungskosten/Tabellen/liste-monatlichen-haushalts-nettoeinkommen.html#115398>.
 - 20 | "Household Consumption Expenditures," Turkish Statistical Institute.
 - 21 | Ibid.
 - 22 | "Consumer Price Index," Turkish Statistical Institute, November 2024, accessed January 28, 2025, <https://data.tuik.gov.tr/Bulten/Index?p=Consumer-Price-Index-November-2024-53620>.
 - 23 | İklim Haber, *Türkiye'de İklim Değişikliği Algısı 2023*, March 2023, https://www.iklimhaber.org/wp-content/uploads/2024/03/konda-arastirma-rapor-2023_v2.pdf and European Climate Foundation, *İklim Değişikliği Algısı Raporu*, December 2021, <https://konda.com.tr/rapor/3/iklim-degisikligi-algisi?l=tr>.
 - 24 | "Climate Change Mitigation Strategy," Directorate of Climate Change.
 - 25 | "Cars and Vans," International Energy Agency, accessed January 28, 2025, <https://www.iea.org/energy-system/transport/cars-and-vans>.
 - 26 | OECD, "Pricing Greenhouse Gas Emissions: Key Findings for Türkiye," 2024, <https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/carbon-pricing-and-energy-taxes/carbon-pricing-turkiye.pdf>.
 - 27 | Astrid Matthey and Björn Büniger, "Methodenkonvention 3.1: Kostensätze," German Environment Agency, December 2020, https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2020-12-21_methodenkonvention_3_1_kostensaeetze.pdf.
 - 28 | "Turkish Emission Trading System," International Carbon Action Partnership, 2022, https://icapcarbonaction.com/system/files/ets_pdfs/icap-etsmap-factsheet-66.pdf.
 - 29 | Matthey and Büniger, "Methodenkonvention 3.1: Kostensätze."
 - 30 | Using an exchange rate of approximately TRY 37 per EUR, as of November 28, 2024: EUR 195 is approximately TRY 7,215; EUR 680 is approximately TRY 25,000. The cost rates are adjusted for 2024 using the Consumer Price Index (CPI) as recommended by the German Environment Agency.
 - 31 | Murat Şenzeybek and Peter Mock, "Vehicle registration tax as a policy instrument to help reducing CO₂ emissions and fuel consumption in Turkey," The International Council on Clean Transportation, April 2019, https://theicct.org/sites/default/files/publications/Registration_Tax_%20in_Turkey_EN_%202019_05_17%20.pdf.
 - 32 | "Road Motor Vehicles," Turkish Statistical Institute, December 2024, accessed July 7, 2025, <https://data.tuik.gov.tr/Bulten/>



Index?p=Road-Motor-Vehicles-December-2024-53463.

- 33 | Acar et al., “Transportation Sector Transformation: Integrating Electric Vehicles into Türkiye’s Distribution Grids.”
- 34 | “Cars and Vans,” International Energy Agency.
- 35 | Agora Verkehrswende, “Mobilitätsarmut in Deutschland: Annäherung an ein unterschätztes Problem mit Lösungsperspektiven für mehr soziale Teilhabe und Klimaschutz,” September 2023, https://www.agora-verkehrswende.de/fileadmin/Projekte/2023/Mobilitaetsarmut_Diskussionspapier/105_Mobilitaetsarmut.pdf.



About the Istanbul Policy Center-Sabancı University-Stiftung Mercator Initiative

The Istanbul Policy Center–Sabancı University–Stiftung Mercator Initiative aims to strengthen the academic, political, and social ties between Turkey and Germany as well as Turkey and Europe. The Initiative is based on the premise that the acquisition of knowledge and the exchange of people and ideas are preconditions for meeting the challenges of an increasingly globalized world in the 21st century. The Initiative focuses on two areas of cooperation, EU/German-Turkish relations and climate change, which are of essential importance for the future of Turkey and Germany within a larger European and global context.

Johanna Wietschel is 2024/25 Mercator-IPC Fellow at IPC.

The interpretations and conclusions made in this paper belong solely to the author and do not reflect IPC's official position

The Cost of Mobility: Addressing Social Equity in Turkey's Road Transport Transformation

16 p.; 25 cm. - (Istanbul Policy Center-Sabancı University-Stiftung Mercator Initiative)

ISBN 978-625-6956-75-9

Cover Design and Page Layout: MYRA

Istanbul Policy Center

Bankalar Caddesi Minerva Han No: 2 Kat: 4
34420 Karaköy-İstanbul
T +90 212 292 49 39
ipc@sabanciuniv.edu - ipc.sabanciuniv.edu



IPC

ISTANBUL POLICY CENTER

SABANCI UNIVERSITY

STIFTUNG MERCATOR INITIATIVE