decarbonisation Iransport



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Transport decarbonisation is one of the key strategies for reducing greenhouse gas emissions and effectively addressing the climate crisis. It supports sustainable mobility and equips decision-makers with the tools to choose mitigation strategies that lower emissions and help create a healthier environment for all.



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It is all about getting rid of cars

Transport decarbonisation is not about banning cars – it's about giving people more choice in how they travel. Cars will always have a role to play, especially for people with disabilities, the elderly, or those living in remote areas. But many people would gladly walk, cycle, or take public transport if these options were safe, comfortable, and convenient. The aim is to provide a variety of sustainable transport options that suit different needs and situations.

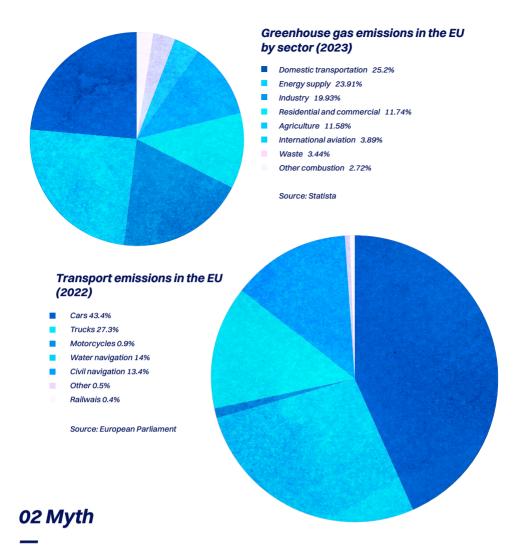


Example from Vienna, Austria:

For decades, Vienna has focused on making walking, cycling, and public transport more convenient for its residents. The city has consistently expanded public transport, redesigned urban spaces to be more pedestrian-friendly, and invested in cycling infrastructure. It has also made long-term on-street parking more expensive. Today, walking, cycling, and public transport account for around three-quarters of all daily trips made by residents.

Source: Mobilitätsagentur Wien





Cutting transport emissions won't make a big difference

Transport is actually one of the largest sources of climate emissions in Europe, accounting for nearly a quarter of all greenhouse gas emissions and being the main contributor to urban air pollution. Road vehicles are responsible for about 70% of transport-related emissions, while aviation and shipping continue to increase their share. Addressing transport emissions would not only help combat climate change but also contribute to cleaner, healthier cities with more space for community life and recreation.



Example from Stockholm, Sweden:

In 2007, Stockholm introduced a permanent congestion charge for cars entering its city centre. In the first year, traffic in the charged zone dropped by 22%. A longer-term study showed this directly led to a 10–14% reduction in ${\rm CO_2}$ emissions from transport in the inner city.



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Low-carbon transport costs too much and brings no benefits

Decarbonising transport isn't just essential for cutting emissions and tackling climate change – it also brings major public health benefits by reducing air pollution. It decreases levels of harmful pollutants like fine particulate matter (PM2.5) and nitrogen dioxide (NO₂), which are linked to respiratory illnesses and premature deaths, particularly in urban areas. Investing in low-carbon transport pays off through lower healthcare costs and better population health, as more people are able to walk and cycle safely. Improvements in air quality and road safety are especially beneficial for vulnerable groups such as children, older adults and people with health conditions.



Example from London, United Kingdom:

A report on the first year (2021) of London's expanded Ultra Low Emission Zone (ULEZ) showed a 44% drop in harmful NO $_2$ levels at roadside locations within the zone, compared to what levels would have been without it. This improvement in air quality was estimated to contribute to a 5% reduction in new childhood asthma cases in outer London.

Source: Mayor of London / Greater London Authority

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Green transport only works in cities, not rural areas

Clean transport solutions can work anywhere, but different places may need different approaches tailored to their specific needs and challenges. The key is to design strategies that fit each community's unique context, whether that means improving rural bus services, supporting electric vehicle use, or building safe cycling infrastructure. Modern approaches like on-demand buses, shared mobility services, and integrated transport apps can deliver efficient service without running large buses on fixed routes all day. Blended models also work for example, traditional buses during peak hours combined with smaller ondemand vehicles at other times, school buses that also serve commuters, and integrated networks that include bike-sharing and senior taxi services.



Example from Estonia:

In 2018, Estonia introduced free public transport on county bus lines for all residents. Within the first year, passenger numbers rose sharply, in some counties by more than 50%. This helped reduce isolation in rural areas and gave people without cars, especially older adults and young people, much-needed access to jobs, education, and essential services.

Source: University of Tartu, Centre for Applied Social Sciences



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Moving to clean transport will destroy automotive industry jobs

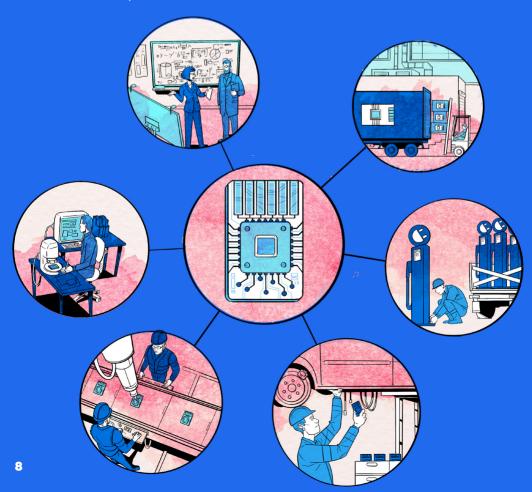
Car manufacturers are already successfully adapting to electric vehicle production, proving that ambitious climate goals can be met without sacrificing jobs. The key is to make sure that automotive regions and their workers benefit from the shift. Moving to cleaner transport is also an opportunity to create high-quality, future-ready jobs. Policymakers play a crucial role in making this happen. With targeted support, training programmes, and strategic industry modernisation, the transition can bring real benefits to those most affected.



Example from Flins, France:

The automotive group Renault is transforming its traditional car plant in Flins into a "Re-Factory", focused on the circular economy. Instead of closing the plant as petrol car production winds down, workers are being retrained for new roles – from retrofitting vehicles and repairing EV batteries to recycling materials. The goal is to protect and create over 3,000 jobs by 2030 by shifting skills from conventional car manufacturing to jobs in the clean transport sector.

Source: Renault Group





Making transport sustainable drains the municipal budget

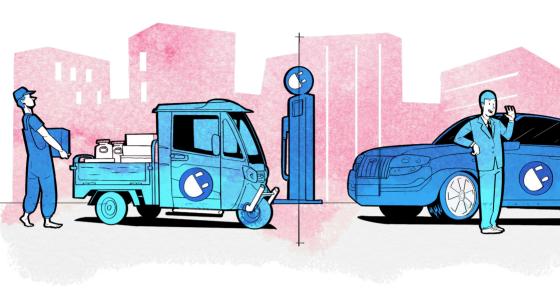
Smart investments in sustainable transport lead to long-term savings for cities through lower road maintenance costs, reduced healthcare spending thanks to better air quality, and stronger local economies. While infrastructure upgrades may require upfront funding, cities can tap into EU funding sources for sustainable mobility, including structural and cohesion funds.



Example from Gdynia, Poland:

Over ten years, the city of Gdynia secured more than &80 million from EU Cohesion Policy funds to modernise and expand its electric trolleybus network. This investment not only cut air and noise pollution but also reduced the city's operational costs, as electricity is both cheaper and more price-stable than diesel. The projects are estimated to prevent around 3,000 tonnes of CO_2 and over 20 tonnes of NO_X emissions each year.

Source: European Commission, Cohesion Data



Electrification of vehicles benefits only the rich

Although electric vehicles (EVs) are currently more expensive than conventional cars, this is changing as battery costs decline and EV production scales up. As prices continue to fall and economies of scale take effect, cleaner vehicles will become affordable for everyone – not just the wealthy. Electricity is generally cheaper than fuel, and with fewer moving parts, EVs require less maintenance, which lowers overall transportation costs. This makes electric mobility increasingly accessible to middle- and lower-income families. Moreover, as more people buy new EVs, the used EV market will grow, driving further costs down and making electric vehicles even more affordable.



Example of total cost of ownership:

According to the Ayvens Car Cost Index, the total cost of owning a mid-sized electric car is already lower than that of a comparable petrol car in most European countries. For instance, in Portugal, the total monthly cost of running a compact EV was €897, compared to €1,119 for a petrol vehicle. These savings stem from significantly lower electricity costs compared to fuel, reduced maintenance expenses (no oil changes, fewer parts to service), and lower vehicle taxes.

Source: LeasePlan / Ayvens - Car Cost Index 2025





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on the basis of a decision by the German Bundestag

This project is part of the European Climate Initiative (EUKI) of the German Federal Ministry for Economic Affairs and Climate Protection (BMWK). The views expressed in this factsheet are the sole responsibility of the author(s) and do not necessarily reflect the views of the Federal Ministry for Economic Affairs and Climate Protection (BMWK).