

## Public Transport's Critical Role in Achieving European Climate Goals

The European Commission has set an ambitious but crucial milestone to reduce greenhouse gas emissions by at least 55% compared to 1990 levels by 2030 – a higher commitment than its previous target of 40%. This signals an accelerated transition towards climate neutrality by 2050, with all economic sectors expected to contribute and take the prescribed action in order for this outcome to be met as outlined in the <a href="Fit for 55 Package">Fit for 55 Package</a>.

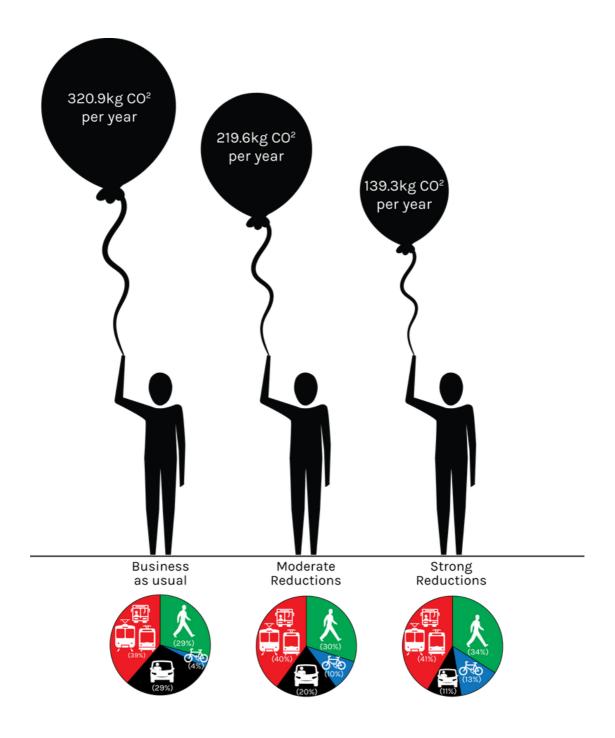
The public transport sector plays a pivotal role in reducing emissions and mitigating the impacts of climate change.

Greenhouse gas emissions in the European Union have decreased across most sectors since 1990, with the exception of transportation which is <u>7 percent higher</u>. Road transportation accounts for around a <u>quarter of total CO2</u> <u>emissions in Europe</u> – passenger cars leading the way at 60 percent – and is the second-largest source of emissions in the EU.

It's fair to say that the transport sector has its work cut out. <u>How can we bring about real, positive change in the timeframe?</u>

For individuals, transport can be the largest part of their carbon footprint. The Institute for Sensible Transport estimates that we could reduce CO2 emissions by more than half by opting for more efficient means of travel; using public transport 41 percent of the time, walking 34 percent of the time, 13 percent by bicycle and only 11 percent by car.





Carbon footprint per year. Source: https://sensibletransport.org.au/wp-content/uploads/2018/08/Comparison.png

With this in mind, it's crucial to find ways to encourage more people to use public transport and reduce reliance on private vehicles. By doing so, individuals and communities can create a more sustainable future and contribute to the ambitious 2050 climate neutral goal. In this article, we will explore various strategies that can be implemented to increase the use of public transport and promote sustainable transportation.

## Develop more efficient and reliable public transport systems

More efficient and reliable public transport systems are essential to encourage its use and make it a viable alternative to personal motor vehicles. This can be accomplished through several strategies:

#### Improve existing infrastructure

Investments in infrastructure can also enhance service quality and attractiveness. This could involve updating or replacing ageing vehicles, repairing or upgrading stations, and ensuring that the public transport system is accessible for people with disabilities.

#### Invest in new technology

Modernizing public transport systems with the latest technology improves service efficiency, reliability, and convenience for passengers. For instance, <u>smart ticketing systems</u> drastically simplify the entire ticketing and boarding process. Passengers can easily purchase tickets through their mobile devices, reducing the need to wait in long lines and making the entire experience more convenient.



Open loop tickets calculate the best fare for a passenger's journey. This is especially useful for passengers who are using multiple modes of transportation in one trip, as the system can automatically determine the best fare based on the entire journey, rather than separate fares for each mode. This results in significant cost savings for passengers, making public transport an even more attractive option.

In addition, open loop ticketing systems also provide real-time information on fare balance and special promotions, further improving the passenger experience. This information can be accessed through the passenger's mobile device, eliminating the need for manual calculations or tickets to be physically checked.



Smart Ticketing Systems. Source: Ridango

#### Clean energy technologies

Investing in clean energy technologies, such as electric buses, reduces emissions and improves the environmental impact of public transport. This not only attracts environmentally conscious users but also contributes to a cleaner and healthier environment.

# Increased data-based investment in public transport operations

It has long been understood that sound operations management is imperative to delivering the best possible public transport services underpinned by availability, relevance, convenience, accessibility and efficiency.

But what enhancements will have the greatest influence on the customer experience AND drive optimal return on investment? This is where a datadriven approach comes in – using data to create customer and business impact.

There are vast amounts of data available to public transport operators – including GPS tracking, passenger counts, and ticketing systems – which can be leveraged to make informed investment decisions. For example:

- Determining the most popular routes and peak usage times, and subsequently optimizing services and reduce wait times to cater to passenger demands.
- Identifying areas with high demand but low supply of public transport, and investing in new routes and services to increase accessibility accordingly.
- Improving the <u>accuracy of real-time information</u> and providing more precise arrival times, contributing to the reliability and convenience of services for passengers.

Data-based investments in public transport infrastructure can improve the usability and comfort of public transport systems, enhancing the overall user experience.



## Promotion of sustainable transportation

In addition to improving public transport systems, communities can also encourage the use of services by promoting sustainable transportation. This can be done through public campaigns, promotions, and incentives. For example, offering discounted or free tickets to people who reduce car use can encourage more people to use public transport. Additionally, creating car-free zones in city centers, or offering incentives for cycling or walking instead of driving, can help promote sustainable transportation and reduce emissions.



Park & Ride facilities. Source https://www.tallinn.ee/en/park-and-ride

Another approach to promote sustainable transportation is the use of Park & Ride facilities. These facilities allow people to park their cars in a designated area on the edge of a city center and then use public transport to complete their journey. This not only reduces emissions but also helps to reduce congestion and improve air quality in city centers, making it a more attractive place to live, work and visit.

## Integrating public transportation with multimodal transportation options

A modern, comprehensive public transport system necessitates the integration of various modes for true A to Z travel. This includes bike sharing programs, ride-hail services, and other transportation options, to create a seamless and convenient door-to-door experience for passengers. Such integration serves to broaden the appeal of public transportation as a viable mode of travel.

For instance, the integration of bike sharing programs with public transport enables passengers to make short trips via bicycle and longer trips with public transport. Similarly, incorporating ride-hail services provides access to mobility options that cater to the specific needs and preferences of passengers.

#### Summary

In conclusion, by implementing effective strategies to increase the use of public transport and promoting sustainable mobility, individuals and communities can contribute to a more sustainable future. From the development of more efficient and reliable public transport systems, to increased investment in infrastructure, to the promotion of sustainable transportation, there are many ways to boost public transport use and create a cleaner and healthier world for everyone.



#### 5 key takeaways

- Europe aims to reduce greenhouse gas emissions by at least 55% by 2030 to become climate neutral by 2050.
- Public transport has the potential to play a significant role in reducing emissions and mitigating climate change.
- Increasing the use of public transport requires efficient and reliable systems through technology, infrastructure and clean energy upgrades.
- Data-based investments in public transport operations can lead to more informed and effective decisions, improving quality and reliability.
- Promoting sustainable transportation through public campaigns, incentives and multimodal options can encourage public transport use.

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