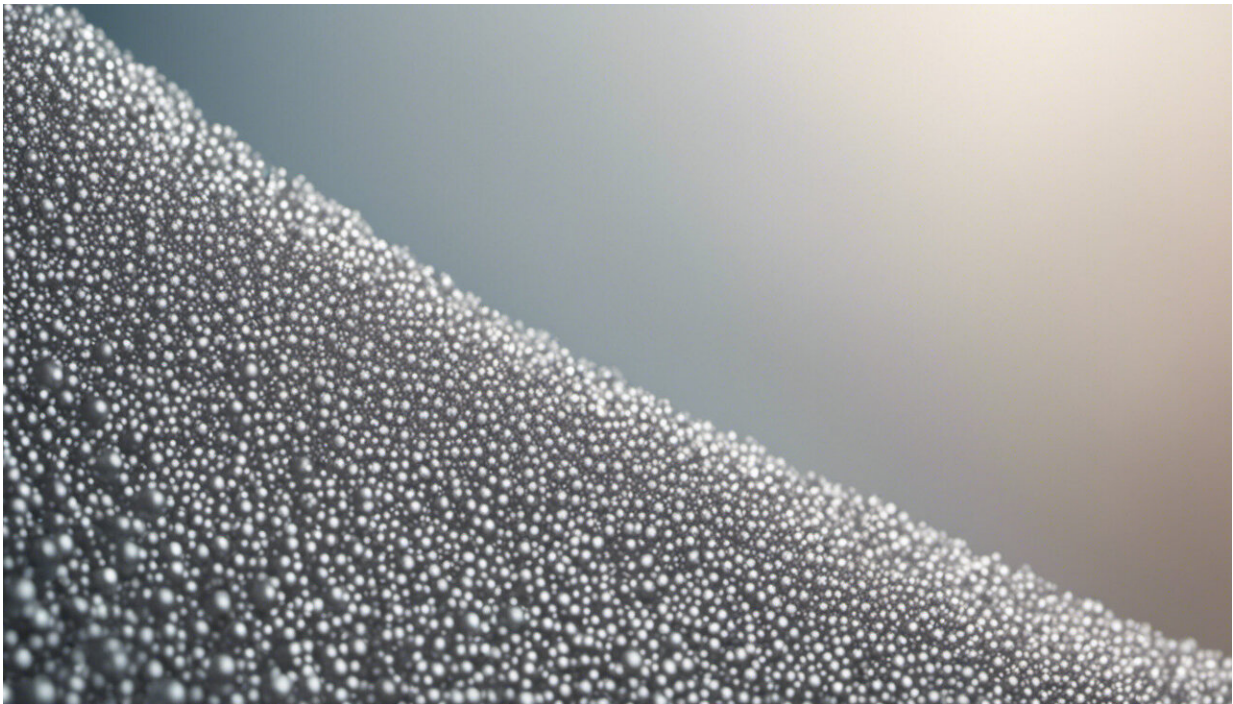


Free public transport is great news for the environment but it's no silver bullet

January 18 2019, by Ansgar Wohlschlegel



Credit: AI-generated image ([disclaimer](#))

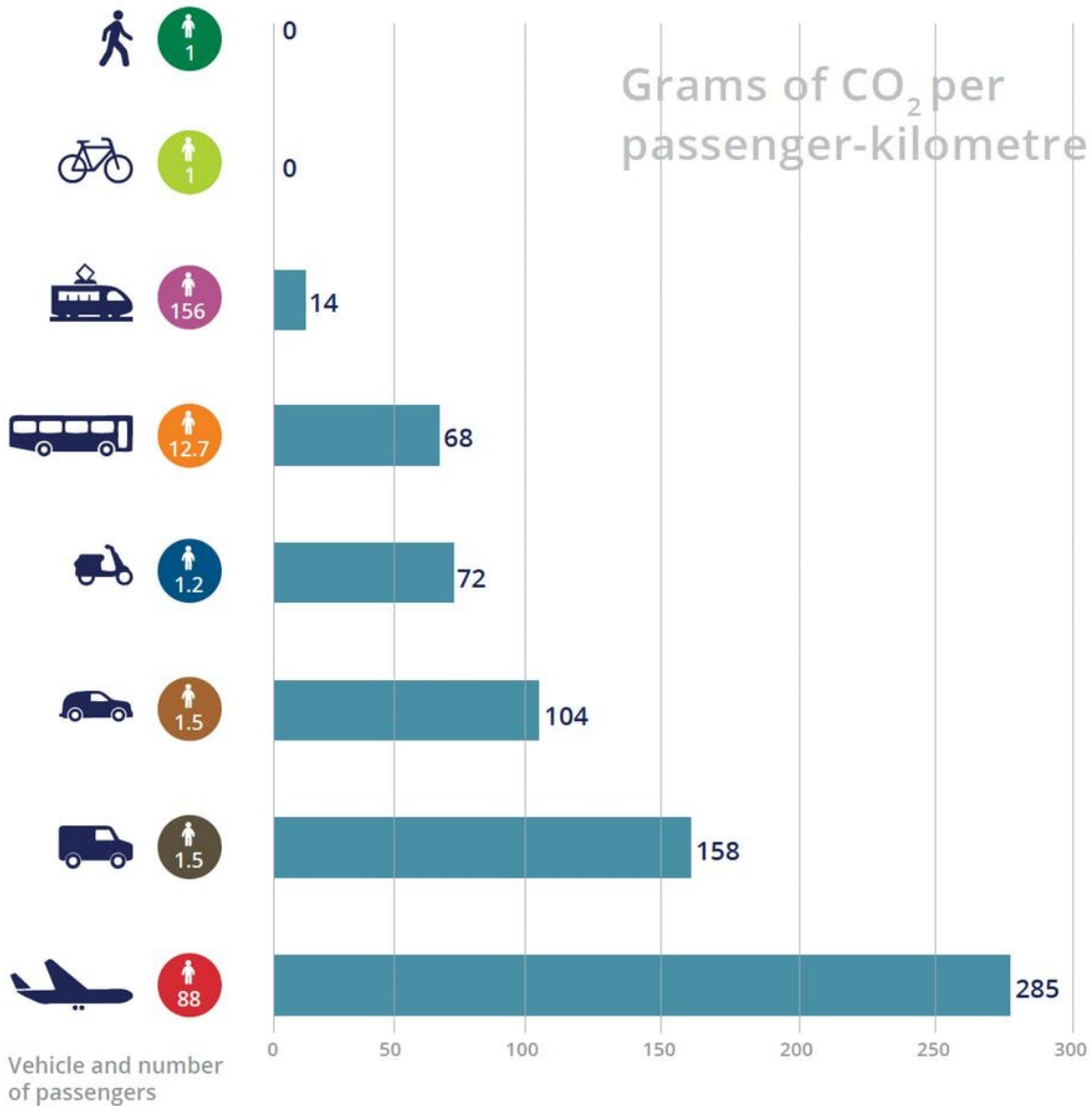
When Luxembourg announced recently that all [public transport in the country will be free](#) from next year, this radical move was received with astonishment. After all, most nations would surely shy away from putting such strain on public finances and from antagonising those taxpayers who don't use public transport.

But supporting [public transport](#) is almost always good for the environment. So, if the finances add up, does this mean that the case for free public [transport](#) is a no-brainer?

Economists like me view subsidies (or taxes) on specific goods as ways to better align people's decisions with what is best for society as a whole. The key question is whether free public transport is a good way of achieving this.

When thinking about whether to buy any item such as a book or an apple, we usually compare how much we enjoy using this item with what we must pay for it. In most cases, if the item is supplied within a [competitive market](#), the price that we pay for something largely reflects society's cost of producing it, such as the use of natural resources or labour.

This is not the case for driving a car, however. In addition to our own private [costs](#) for petrol and wear and tear, every car ride imposes costs on other people by polluting the air and congesting the roads. Few of us would want to fully account for these social costs when deciding whether to use the car to do the school run or the groceries. Therefore, people will often find that the benefit of another car ride exceeds the private cost, even when [social costs](#) – that pollution and congestion – exceed any social benefit. In other words, people will use their cars too much from society's point of view.



Trains and buses emit far less CO₂ per passenger-kilometre (though a full car is cleaner than a half-full bus). Credit: [EEA](#)

The same reasoning applies for a person's choice between private and public transport. If I think about whether to take the car to get to work, I

will compare the benefits and costs to me with the next best alternative, which may be to take the bus or train.

But my use of public transport affects other people much less than if I travelled by car: per user, public transport causes much less additional road congestion and air pollution [than a car](#). Yes, if too many people take the bus it may get overcrowded, but once a specific service is consistently over capacity, the bus operator can add more services. But as most people base their decisions on their own cost on benefits rather than those they impose on other people, the decision between public and private transport will typically be biased against public transport.

Why we have subsidies

The economic idea of subsidising public transport is to level the playing field between these options. If the subsidy is equal to the difference in other people's cost of me driving the car versus taking the bus, my decision on the mode of transport will be aligned with society's best interest. So, are the environmentalists right after all?



Credit: AI-generated image ([disclaimer](#))

Let's have a look at Luxembourg. Public transport in the small, wealthy country is already [dirt cheap](#) – a two-hour ticket with unlimited journeys is just €2 – but road congestion is still [among the worst worldwide](#). It seems Luxembourgish commuters are still choosing to spend hours on a congested road, even though they could easily afford the train.

Partly this is because, in general, individual traffic is more convenient than public transport, as car drivers can travel independently of timetables, train lines or bus routes. Therefore, a denser network or more frequent timetable may be a more effective way of getting people out of their cars than an even higher subsidy. Furthermore, when cheap public transport induces commuters to leave their cars at home, roads get less congested. However, this may make driving into the city more attractive for people who otherwise would have stayed at home, or more people

may choose to live on the outskirts rather than in the city centre if commuting gets more convenient or cheaper.

This demonstrates a fundamental dilemma of transport policy: as soon as traffic problems are relieved, even more people will want to travel. Therefore, those who are sceptical of entirely free public transport do have a point. An alternative way of levelling the playing field between car driving and public transport without inducing even more people to travel is to increase the petrol tax. Indeed, [petrol prices in Luxembourg](#) are markedly lower than in neighbouring Germany, Belgium and France, which may well contribute to Luxembourgers' reliance on cars.

In times of [ever more alarming news](#) about global warming, every car that won't be driven as a result of free public transport is an achievement. However, an optimal policy needs to carefully balance subsidies for public transport use with petrol taxes and investments in the public transport network.

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