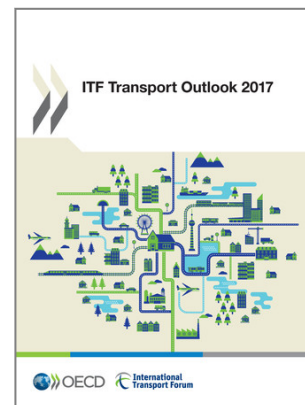


OECD *Multilingual Summaries* ITF Transport Outlook 2017

Summary in English



Read the full book on: [10.1787/9789282108000-en](https://doi.org/10.1787/9789282108000-en)

Background

The "ITF Transport Outlook" provides an overview of recent trends and near-term prospects for the transport sector at a global level. It also presents long-term projections for transport demand to 2050 for freight (maritime, air and surface) and passenger transport (car, rail and air) as well as related CO₂ emissions, under different policy scenarios.

It specifically looks at how the main policy, economic and technological changes since 2015, along with other international developments such as the establishment of the UN Sustainable Development Goals, are shaping the future of mobility. A special focus on accessibility in cities highlights the role of policies in creating sustainable transport systems which provide equal access to all.

Findings

CO₂ emissions from transport could increase 60% by 2050, despite the significant technology progress assumed in the Outlook's baseline scenario. If no additional measures are taken, CO₂ emissions from global freight could increase by 160%, as international freight volumes grow threefold in the baseline scenario, which builds on OECD trade projections. This is largely due to increased use of road transport, especially for short distances and in regions that lack rail links, such as South-East Asia. Optimising routes or sharing trucks and warehouses between companies would allow higher load factors and fewer empty trips. Such efficiency gains could reduce truck CO₂ emissions by up to one third.

Air passenger numbers will continue to grow strongly as cities around the world become more accessible by air. Over the next 15 years, passenger air traffic could grow between 3% and 6% annually, with intra-Asian routes growing fastest at almost 10%. CO₂ emissions from international aviation could grow around 56% between 2015 and 2030, even with much improved fuel efficiency. Liberal air service agreements and more low-cost intra-regional flights will enable the network to expand and prices to fall, thus driving growth. Cities around the world will become more accessible as travel times shorten. Strong regional discrepancies in accessibility by air remain, but investment in regional airports and better surface links between airports and cities can address this.

Motorised mobility in cities is set to double between 2015 and 2050, rising 41% to 2030 and 94% by 2050 in the Outlook's baseline scenario. The share of private cars will continue to increase strongly in developing regions and fall only slightly in developed economies. In the alternative policy scenarios where public transport is incentivised, motorised passenger-kilometres reach similar levels, but with buses and mass transit covering more than 50% of the total demand.

Policy insights

The 2016 Paris climate agreement must be translated into concrete actions for the transport sector.

A wide range of policies and measures will need to be implemented to maintain transport CO₂ emissions at their 2015 levels. All policy levers will need to be pulled: avoid unnecessary transport

demand, shift to sustainable transport options and improve efficiency. Market-based mechanisms, such as the offsetting scheme for international aviation decided by the International Civil Aviation Organisation, will also be needed. It is still possible to limit global warming to 2 degrees Celsius above pre-industrial levels with such measures, according to the scenarios of the International Energy Agency, but not to the 1.5 degrees aspired to by the Paris agreement.

Policy will need to be agile in managing disruptive innovation in transport.

Technological innovations such as electric mobility, autonomous vehicles or new shared mobility solutions are likely to change mobility patterns radically, notably in cities. Some of these innovations provide opportunities to significantly reduce the CO2 footprint of transport and improve inclusive and equitable access. In the freight sector, autonomous trucks could dramatically shift the competitive advantage among the different modes towards road freight. Policy and planning need to account for these changes to avoid building expensive infrastructure soon to become obsolete, or locking in carbon-intensive or inequitable development pathways.

Reducing CO2 from urban mobility needs more than better vehicle and fuel technology.

Technological progress alone will not achieve a reduction of CO2 emissions in cities. Behaviour-changing policies such as fuel taxes, low transit fares or land-use policies that limit urban sprawl are needed to generate the additional CO2 mitigation required. Lower CO2 emissions from urban mobility can also come as positive side effects of policies targeting local air pollutants and congestion, which are the most pressing transport challenges in many cities.

Targeted land-use policies can reduce the transport infrastructure needed to provide more equitable access in cities.

Providing equitable access to jobs and services is one of the targets of the UN Sustainable Development Goals. In many cities, the flexibility offered by private cars means that they provide better accessibility (as measured by the number of opportunities reachable in a given amount of time) than public transport, even when taking congestion into account. Yet, public transport has the ability to provide inclusive access to opportunities where it is itself accessible to all travellers and its coverage is properly planned. As dense cities make public transport systems more efficient, targeted land-use policies can contribute to improving access.

Governments need to develop planning tools to adapt to uncertainties created by changing patterns of consumption, production and distribution.

Agile planning procedures grounded in a long-term, strategic vision help to adapt to uncertainties associated with shifting patterns in global demand, production and shipping routes. Timing is crucial for good infrastructure planning and the phasing-in of capacity to smoothen the lumpiness of infrastructure investment, for instance in ports. Such plans should set the direction for future development, prioritise investments and identify potential future bottlenecks. They can also form the basis for the reservation of land, for instance for future port and corridor development.

© OECD

Reproduction of this summary is allowed provided the OECD copyright and the title of the original publication are mentioned.

Multilingual summaries are translated excerpts of OECD publications originally published in English and in French.



[Read the complete English version on OECD iLibrary!](#)

© OECD (2017), *ITF Transport Outlook 2017*, OECD Publishing.

doi: 10.1787/9789282108000-en