1.1

Global Transport and Climate Change

As global emissions from the transport sector continue to rise, gaining a better understanding of the specific sources of these emissions, and how to address them, is critical. Which sub-sectors, regions and actions are leading to the increase in emissions? And where is progress being made towards decarbonisation? This section highlights global transport demand and emission trends, comparing them broadly across regions and framing the policy responses through the *"Avoid-Shift-Improve"* framework. The subsequent section dives deeper into the demand, emissions and policies of each region. *(For detailed information by transport sub-sector, see Section 2 of this report.)*

Key findings

Demand trends

- Global passenger transport demand remained at similar levels between 2015 and 2017. Road transport accounted for 78% of this demand in 2017.
- More goods than ever before are being transported on trucks as freight activity has continued to grow, surpassing 120 trillion tonne-kilometres in 2017.

Emission trends

- Increases in road vehicles (both passenger and freight), aviation and shipping were the leading factors behind the global growth in transport carbon dioxide (CO_2) emissions between 2000 and 2018.
- Transport accounted for 14% of total global greenhouse gas emissions in 2018.
- Asia experienced the highest increase in transport CO_2 emissions among world regions from 2010 to 2019, at 41%, while Europe's emissions fell 2% during this period.
- International aviation and shipping emissions both recorded double-digit growth between 2010 and 2019.
- Between 2010 and 2019, annual growth in gross domestic product (GDP) averaged 2.9%, while transport CO_2 emissions increased only 2.0%.

Policy measures

- Growing evidence shows that Avoid and Shift strategies can account for 40-60% of transport emission reductions, at lower costs than Improve strategies.
- Countries' updated Nationally Determined Contributions (NDCs) under the Paris Agreement continue to focus strongly on Improve measures, which represent 52% of all measures, whereas Shift measures account for 38% and Avoid measures for only 10%.

Impacts of the COVID-19 pandemic

- In total, transport emissions declined by 1.5 gigatonnes of CO_2 in 2020.
- For the transport sector, CO_2 emissions in 2020 fell 19.4% below 2019 levels, with emissions dropping 56.4% in international aviation, 31.9% in domestic aviation, 24.8% in international shipping and 14.6% in ground transport (road and railways).
- Sales of new vehicles dropped 14.5% below 2019 levels in 2020.

Overview

The transport sector contributes a growing share of the world's greenhouse gas emissions. During the period from 2010 to 2019, it was the fastest growing combustion (fossil fuel-burning) sector globally. In 2019, transport was the second largest source of CO_2 emissions after the power sector (on par with "other industrial combustion" for manufacturing and fuel production).[1] Transport was responsible for 30% of global final energy demand and for 23% of global direct CO_2 emissions from the energy sector that year.[2]

In 2020, the worldwide impacts of the COVID-19 pandemic reduced global energy demand by a projected 4%, and total global CO_2 emissions fell an estimated 5.4% (with 1.9 billion fewer tonnes of CO_2 released than in 2019).[3] CO_2 emissions from transport plunged 19% for the year, due mainly to rapid emission reductions during the early months of the pandemic; overall, international aviation emissions were down 56%, international shipping down 25%, and ground transport down nearly 15% in 2020, compared to 2019.[4] *(For more on the impacts of COVID-19, see Box 1 in this section.)*

Demand trends

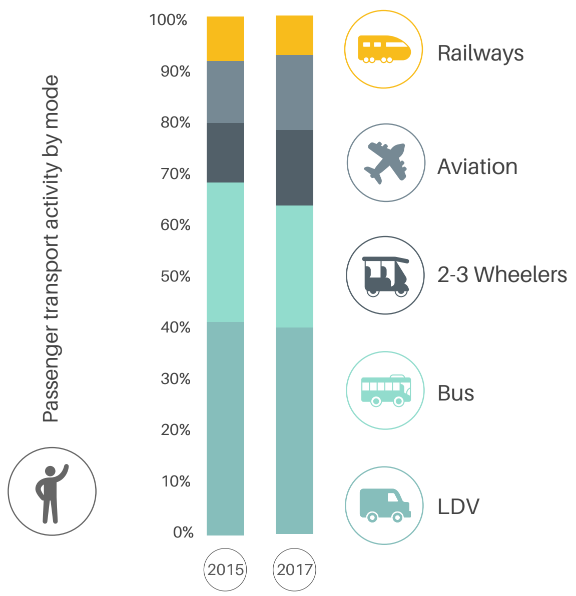
Road transport (both passenger and freight) accounts for the largest portion of global transport, and its growth is closely related to trends in new vehicle purchases. Sales of new passenger cars (road motor vehicles other than motorcycles) and commercial vehicles (light trucks, heavy trucks and buses) continued to increase up to 2017, with a record 95 million vehicles sold that year.[5] Sales then declined over the subsequent two years, to 91 million new vehicles sold in 2019.[6]

Growth in commercial vehicle sales is driven mainly by the demand for road freight transport.[7] In 2019, more than 26 million new commercial vehicles were sold, driven by strong demand in high-income countries.[8] By 2050, the global fleet of passenger and commercial vehicles is expected to more than double, including many older, polluting vehicles that will likely remain in circulation in Africa, Central Asia and Latin America.[9]

Global passenger transport demand

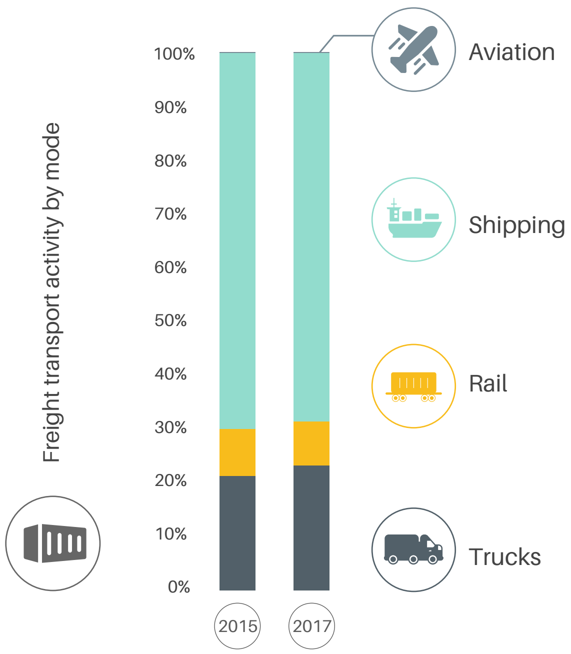
Global passenger transport demand remained at similar levels between 2015 and 2017. In 2017, global passenger transport activity totalled 55 trillion passenger-kilometres, of which 78% was from road transport.[10] Although rail is by far the most carbon-efficient transport mode, with the lowest CO_2 emissions per passenger, it represented less than 8% of passenger activity that year.[11] Motorised two- and three-wheelers and aviation accounted for the largest growth in passenger transport activity between 2015 and 2017, a combined increase of around 25% *(see Figure 1)*.[12] In many developing countries, two- and three-wheelers are the fastest growing mode of motorised mobility.[13]

Figure 1. Share of passenger transport activity (passenger-kilometres) by mode, 2015 and 2017



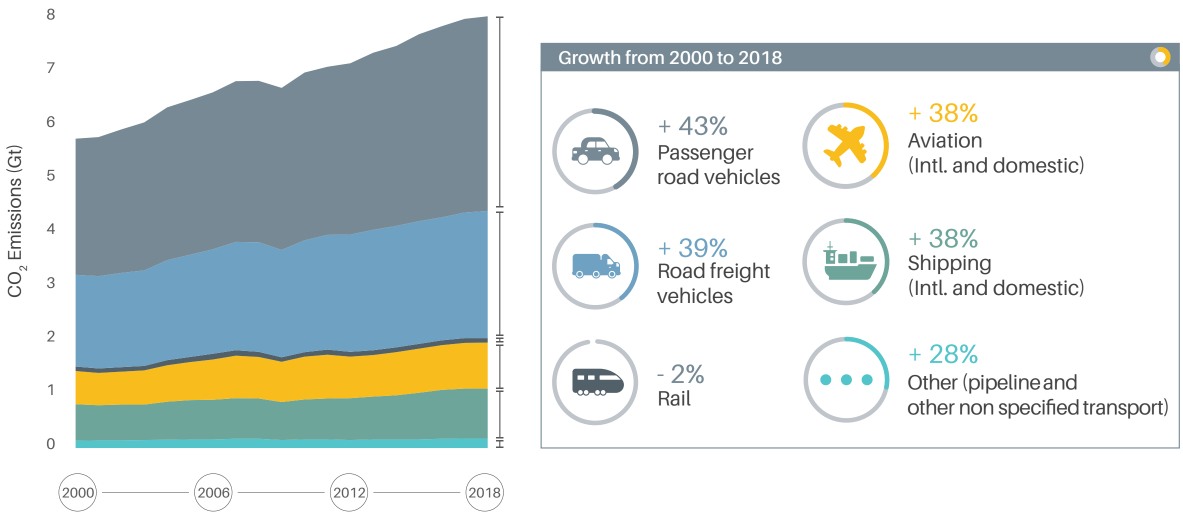
Source: See endnote 12 for this section.

Figure 2. Share of freight transport activity (tonne-kilometres) by mode, 2015 and 2017



Source: See endnote 14 for this section.

Figure 3. Transport CO_2 emissions by mode, 2000-2018



Source: See endnote 16 for this section.

Global freight transport demand

More goods than ever before are being transported on trucks as freight activity has continued to grow, surpassing 120 trillion tonne-kilometres in 2017 *(see Figure 2)*.[14] This increase is attributed mainly to the rising demand for consumer goods being transported by road freight and maritime shipping.

The freight sector is widely seen as the most challenging transport segment to decarbonise, due in part to a lack of comprehensive policies and mature technology options. Key barriers to decarbonising road freight include the low supply of zero-emission freight vehicles, the ageing and non-adaptable existing freight fleet, and the lack of resources in under-developed and developing countries to acquire new vehicle fleets.[15]

Emission trends

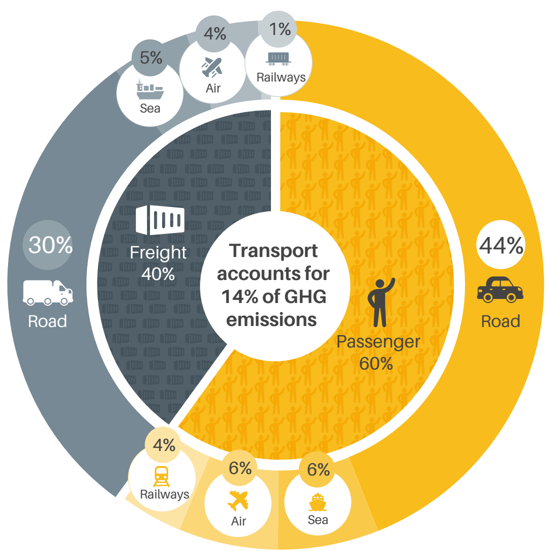
Global emission trends

Increases in road vehicles (both passenger and freight), aviation and shipping were the leading factors behind the global growth in transport CO_2 emissions between 2000 and 2018 *(see Figure 3)*.[16] Improvements in fuel economy for road transport were outpaced by the increased sales of larger, heavier vehicles *(see Transport Demand section in Section 2.1)*. In contrast, CO_2 emissions from railways declined between 2000 and 2018, due mainly to the electrification of major rail corridors and to further efficiency improvements.[17]

Transport accounted for 14% of total global greenhouse gas emissions in 2018.[18] Road transport (both passenger and freight) contributed nearly three-quarters (74%) of transport greenhouse gas emissions that year, while rail represented only 5% *(see Figure 4)*.[19] Around 36% of transport CO_2 emissions occur in urban areas, with 31.6% coming from passenger transport and 4.7% from freight.[20]

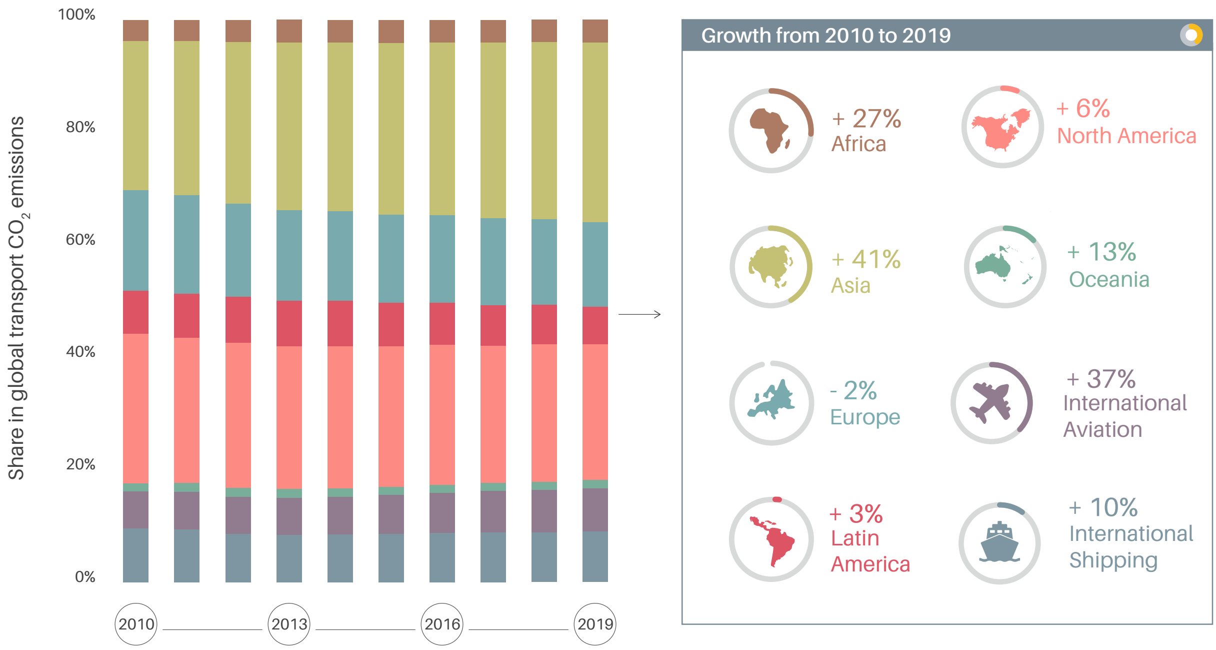
Black carbon – a short-lived climate pollutant emitted into the air as a result of incomplete fuel combustion – is both a major contributor

Figure 4. Greenhouse gas emissions from transport, by mode, 2018



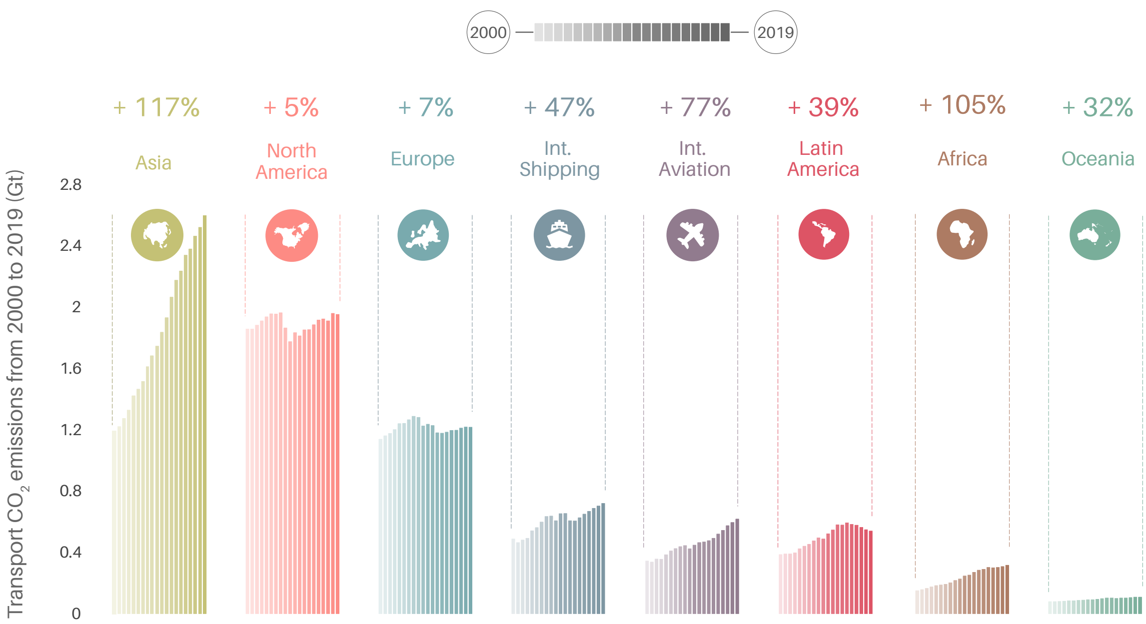
Source: See endnote 19 for this section.

Figure 5. Share of transport emissions by region and in international aviation and shipping, 2010-2019



Source: See endnote 24 for this section.

Figure 6. Growth in transport emissions by region and in international aviation and shipping, 2000-2019



Source: See endnote 29 for this section.

to climate change and a growing public health concern. Black carbon is a key component in fine particulate matter (PM2.5), which can penetrate deep inside the lungs, contributing to premature mortality and a range of cardiovascular and respiratory diseases.[21] In 2015, around 4,770 gigatonnes of black carbon were emitted worldwide, of which 11% were from road transport and 3.5% from all other transport modes combined.[22] Road transport accounts for an estimated 30% of global urban emissions of ambient particulate matter (less than 2.5 micrometres in size).[23]

Regional emission trends

Between 2010 and 2019, transport CO_2 emissions rose in all regions except Europe, where they fell 2% *(see Figure 5)*.[24] The emission improvement in Europe is attributed to advanced fuel economy regulations and strong sustainable urban mobility planning frameworks, among other factors. **Asia**, which in 2011 became the top regional emitter of transport CO_2 due to its large population and strong economic growth, continued to lead in 2019 and experienced the highest growth in transport CO_2 emissions among regions from 2010 to 2019, at 41%.[25] In **Latin America and the Caribbean**, transport CO_2 emissions increased 3% overall during 2010-2019, but the growth in emissions has declined year-on-year since 2015.[26] *(For more on emissions by region, see Sections 1.2 to 1.7.)*

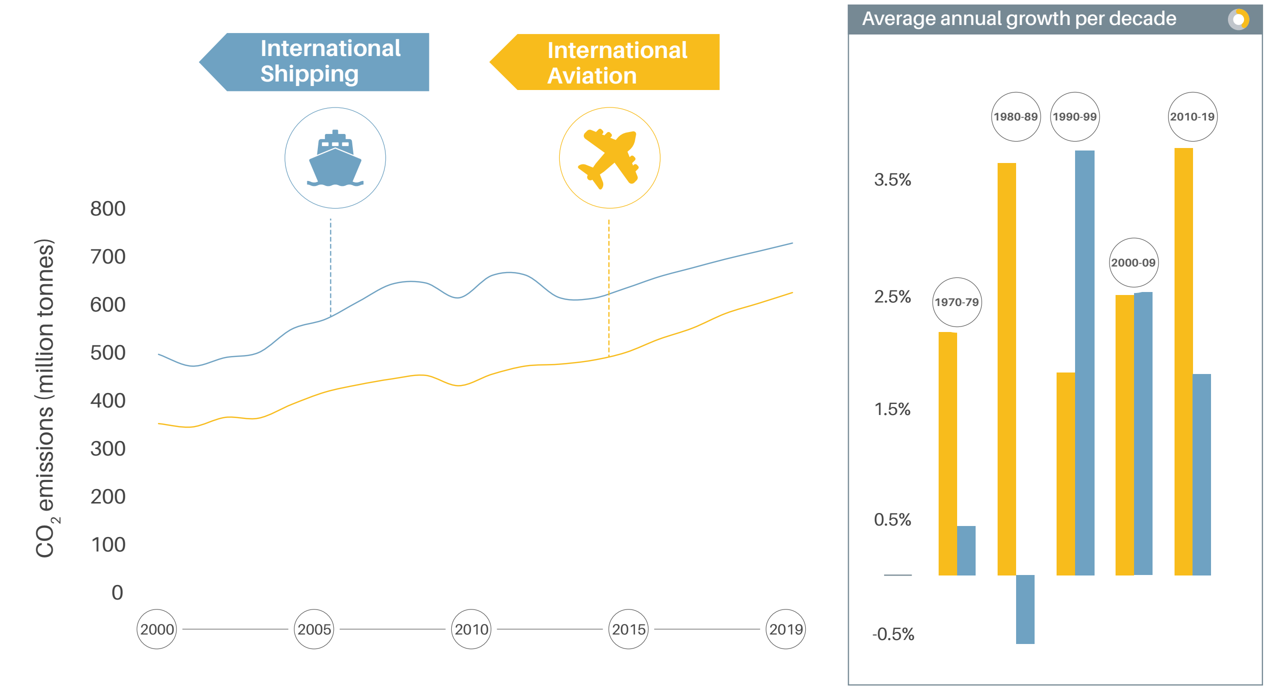
International aviation and shipping emissions both recorded double-digit growth between 2010 and 2019.[27] These two transport modes each emit more CO_2 annually than the entire regions of Latin America and the Caribbean, Africa and Oceania *(see Figure 6)*.[28]

International aviation activity grew 7.1% between 2017 and 2018, from 7,699 billion passenger-kilometres to 8,258 billion passenger-kilometres.[29] With the worldwide growth in air travel, CO_2 emissions from international flights increased 3.8% annually between 2010 and 2019, reaching 627 million tonnes.[30]

Whereas international aviation is focused largely on passenger travel, international maritime transport caters almost exclusively to freight. Maritime shipping is the backbone of global trade. In 2018, 11 billion tonnes of goods were transported over a total distance of 85,864 billion cargo tonne-kilometres.[31] As international maritime shipping has increased, so too have related CO_2 emissions, totalling 730 million tonnes in 2019.[32] However, emissions from maritime shipping have risen more slowly than those from aviation: between 2015 and 2019, average annual emission growth in shipping stayed between 2.4% and 2.8%, and this growth decreased overall in the decades between 1990 and 2019 *(see Figure 7)*.[33]

Between 2010 and 2019, annual GDP growth averaged 2.9%, while transport CO2 emissions increased only 2.0%.[34] This trend is especially apparent in member countries of the Organisation for Economic Co-operation and Development (OECD), where strong fuel economy regulations and other measures have supported efficiency gains.[35] Even as global transport emissions have risen, especially in rapidly developing regions such as Asia, the growth in GDP (historically the main driver of transport CO_2 emissions) has continued to outpace the growth in emissions. This observed decoupling has become more pronounced since 2004, indicating that implementing low carbon solutions in transport likely does not have a negative impact on economic growth.[36]

Figure 7. Emission growth in international aviation versus shipping



Source: See endnote 33 for this section.

Policy measures

Applying *Avoid-Shift-Improve (A-S-I)* measures through integrated, inter-modal and balanced approaches is critical to unleashing the full benefits of sustainable, low carbon transport. The *A-S-I* framework has been central to sustainable, low carbon transport for more than a decade *(see Figure 8)*.[37]

The *A-S-I* approach follows an implicit hierarchy, with appropriate and context-sensitive *Avoid* measures intended to be implemented first, followed by *Shift* measures and finally by *Improve* measures.[38] This prioritisation can help reduce environmental impact, improve access to socio-economic opportunities, increase logistics efficiency, reduce congestion, improve air quality and increase road safety. The *A-S-I* framework calls for:

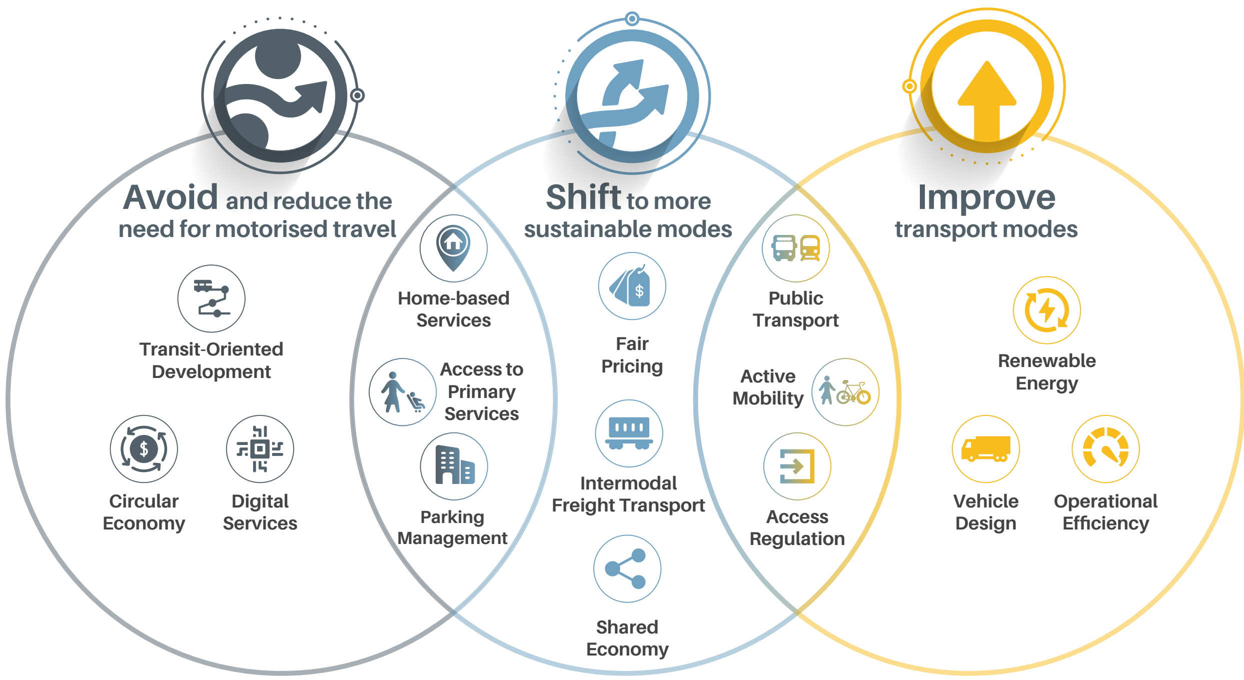
- *Avoiding* unnecessary motorised trips based on proximity and accessibility;
- *Shifting* to less carbon-intensive modes – that is, from private vehicles to public transport, shared mobility, walking and cycling, water-based freight, electrified road-rail freight, and cargo bikes for last-mile deliveries, among others; and
- *Improving* vehicle design, energy efficiency and clean energy sources for different types of freight and passenger vehicles.

Growing evidence shows that *Avoid* and *Shift* strategies can account for 40-60% of transport emission reductions, at lower costs than *Improve* strategies *(see Figure 9)*.[39] There is wide recognition that current policies are over-reliant on technology-focused Improve strategies, and thus are insufficient to achieve the systemic and rapid transformation that is needed to meet global climate and equity goals.

Avoid and *Shift* measures (for example, allocating road space for dedicated bus lanes) may be far less costly for improving transport access than many Improve measures, particularly in rapidly urbanising developing countries. However, more research is needed to assess the long-term cost effectiveness.

The narrative of sustainable mobility has evolved over the decade since the creation of the *A-S-I* concept; in response, a number of stakeholders are engaging in a process to refocus the framework, integrating decades of experience and harnessing momentum on green, equitable pandemic recovery and an unprecedented disbursement of funds through recovery packages. A renewed focus on the framework presents an opportunity to optimise *A-S-I* strategies through novel lenses, including gender and geographic equity; freight transport; and renewable energy.

Figure 8. *Avoid-Shift-Improve* Framework



**The A-S-I diagramme presents a non-exhausive list of measures for illustrative purposes only.*

Source: See endnote 37 for this section.

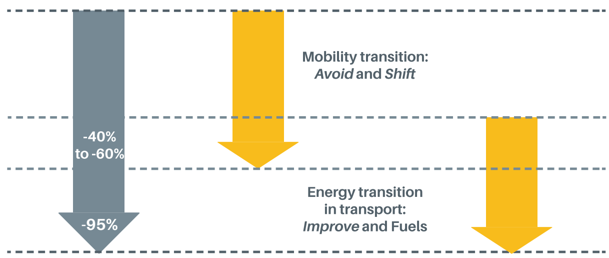
An enhanced focus on *Avoid* and *Shift* is of particular relevance to fast-growing, middle-income and low-income economies working to increase access in response to development demands.

However, *Avoid* is often subject to political resistance, especially in the Global South, where a key priority is to maintain an already robust walking and cycling mode share. In areas where the majority of the workforce needs to travel for livelihoods, the call is to *Shift* to more sustainable modes; however, travel alternatives are often limited, especially for lower-income riders. An intended outcome of the refocusing process is to build upon the strengths of the framework to achieve systemic shifts through a more balanced and cost-effective application of *A-S-I* measures.

Countries' updated Nationally Determined Contributions (NDCs) towards reducing emissions under the Paris Agreement continue to focus strongly on Improve measures, which represent 52% of all measures, whereas *Shift* measures account for 38% and Avoid measures for only 10%.[40] Given the long-term impacts of some *Avoid* and *Shift* policy measures, it is important that countries' NDCs and Long-Term Climate Strategies include a balanced *A-S-I* approach. However, the over-focus on *Improve* measures, particularly the electrification of vehicles, risks distracting attention from necessary long-term structural changes in business models, supply chains, city planning and behaviour.[41] *(see Section 3: Responses to Address Climate Change in the Transport Sector)*

Shift and *Improve* measures – and the overall decarbonisation of the transport sector – are most effective when combined with

Figure 9. Potential emission reductions resulting from actions in the A-S-I framework



Source: See endnote 39 for this section.

Avoid measures. *Avoid* measures allow cities to limit vehicle traffic to within the capacity of roadways, and they reward travellers who use transport modes that are resource, space and energy efficient. Many *Avoid* measures aim to actively manage transport demand, with approaches such as congestion charging, carbon pricing for all transport modes, and incentives for behavioural modifications leading to wide-scale changes.

Specific policy measures by region are detailed in Section 2, and sub-sectoral responses are detailed in Section 3.

Box 1. Impacts of the COVID-19 pandemic on global transport demand and emissions

In total, transport emissions declined by 1.5 gigatonnes of CO_2 in 2020. As a result of the COVID-19 pandemic, global energy demand fell a projected 4%, and total global CO_2 emissions dropped an estimated 5.4%. The decline in emissions is attributed mainly to the rapid reductions in aviation and road transport activity in the early months of the pandemic. Despite the emission drop, the total amount of CO_2 in the earth's atmosphere was expected to increase 0.6% in 2020, just below the 0.68% rise projected in pre-COVID scenarios.

For the transport sector overall, CO_2 emissions in 2020 fell 19.4% below 2019 levels, with emissions dropping 56.4% in international aviation, 31.9% in domestic aviation, 24.8% in international shipping and 14.6% in ground transport (road and railways). Total emissions from ground transport fell by around 947 million tonnes of CO_2, and from domestic and international aviation by around 466 million tonnes of CO_2 *(see Figure 10)*.

The COVID-19 pandemic led to a 14.5% drop in new vehicle sales, from 91 million new vehicles sold in 2019 to 78 million sold in 2020.

The impact of the COVID-19 pandemic on freight transport has highlighted the interconnectedness of the global economy and revealed underlying vulnerabilities in international supply chains and transport of goods. While initial projections estimated substantial reductions in freight transport volumes, data from the International Transport Forum's forthcoming 2021 Transport Outlook reveal a roughly 4% decline between 2019 and 2020, attributable in part to the decrease in the consumption and trade of fossil fuels as overall energy demand fell.

In international aviation, the number of seats offered by airlines, as well as the total number of domestic and international flights, each fell 61% in 2020, with an estimated 8.2 million fewer international flights during the year. As airlines sought alternative revenue streams, cargo aviation was up 6.6%, growing by 25,000 flights. In total, emissions from international aviation declined by 354 million tonnes of CO_2.

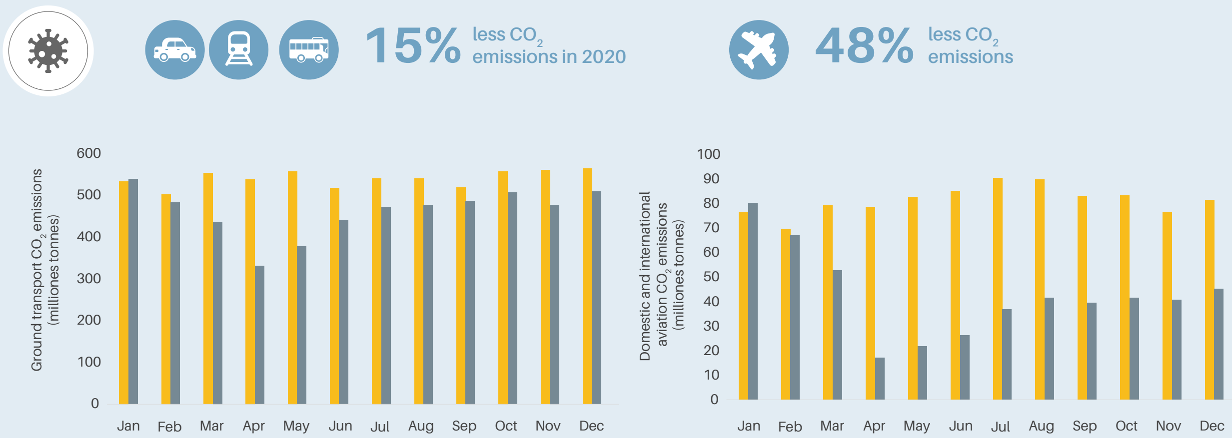
In general, the COVID-19 pandemic has laid bare the weaknesses of the transport sector's preparedness for disasters and global shocks. In many cities, public transport systems were pressured to the verge of collapse in 2020, following significant declines in ridership, revenue and passenger trust. Many people returned to private vehicles as their first choice of mobility, while others, lacking access to safe and reliable transport services, were stranded by lockdowns and deprived of work to maintain their livelihoods, resulting in greater impoverishment among the most vulnerable groups.

At the same time, COVID-19 has pushed us to reflect on how we move both people and goods, and what the pandemic will mean for the future of transport. During early lockdowns, many urban dwellers appreciated the cleaner air and reduced noise pollution due to less traffic. Cities around the world reclaimed streets for pedestrians and cyclists, adopted cost-efficient "tactical urbanism" measures that enable active mobility, and depended more on freight and logistics as residents turned to online deliveries at an unprecedented pace.

The decisions that governments and multilateral entities make to support economic recovery from the pandemic will determine the degree of transformation that will be achieved through the next decade and beyond. The urgency of these decisions must not derail efforts to achieve universal equitable access to mobility, or the push for ambitious, systemic decarbonisation across all transport modes, whether on land, air or sea.

For more on the Impacts of the COVID-19 pandemic on specific transport modes, see *Box 1 in Section 2*.

Figure 10. COVID-19 impacts on CO_2 emissions from land transport and domestic aviation



Source: See endnote 4 for this section.

The next section examines transport demand and emissions in each world region, helping to illuminate the global trends and figures by narrowing in on the major developments, trends and policy measures that are shaping the transport landscape regionally.

Annex: Methodological Note

Data usage

Time period for data:
The report strives to utilise the most recent publicly available data and information just prior to the time of publication (as of 31 May 2021). The figures in the report were developed between September and December 2020 using the most recent data available.

Secondary data:
SLOCAT relies on secondary data and information collected and provided by SLOCAT partners and other entities and does not make use of any internal modelling tools.

Data on sustainable mobility: A call to action

The report benefits directly from data collected by a wide range of stakeholders working in different areas of transport.

Data are important for providing a comprehensive picture of the status of sustainable, low carbon transport and are essential for both policy and investment decision making. In these times of change, it is critical to upgrade data and policy collection and interpretation capacities to better understand progress and the hurdles that must be addressed.

The data limitations mentioned below are not new. Obtaining regular, reliable and public data across regions and transport modes remains an outstanding issue. When an increasing number of stakeholders are collecting data and policy information, more and better open-access data and capacity building efforts for data interpretation are supported by many multi-stakeholder partnerships in the sustainable, low carbon movement.

If you share our passion for open-access data and knowledge towards greater impact on policy and investment decision making worldwide and/or would like to contribute data or knowledge to our collective efforts on this report, **please reach out to the research team in the SLOCAT Secretariat at tcc-gsr@slocatpartnership.org**.

Specific data used in this report

Data on emissions

The data in this edition of the report point to the direct carbon emissions from transport activity; they do not cover the indirect emissions and land-use impacts associated with certain modes of transport. The report primarily utilises CO_2 emission data compiled in the Emissions Database for Global Atmospheric Research (EDGAR) from the Joint Research Centre of the European Commission, as this represents the most recent, comprehensive dataset on transport CO_2 emissions. However, this global dataset does not convey in full detail the unique situations of individual countries.

EDGAR provides estimates for fossil CO_2 emissions from all anthropogenic activities with the exception of land use, land-use change, forestry and the large-scale burning of biomass. The main activities covered are CO_2 emissions emitted by the power sector (i.e., power and heat genertion plants), by other industrial combustion (i.e., combustion for industrial manufacturing and fuel production) and by buildings and other activities such as industrial process emissions, agricultural soils and waste. Transport activities covered within EDGAR include road transport, non-road transport, domestic aviation, and inland waterways on a country level, as well as international aviation and shipping.[1]

For the world, regions and countries, the CO_2 emission data (provided by EDGAR) span through 2019. In a few places in the report, CO_2 data for 2020 are shown to illustrate the impact of the COVID-19 pandemic; however, these data are based on a different methodology than the EDGAR dataset and should not be compared directly with the data from previous years.

The latest CO_2 emission data for individual transport modes are for 2018 and have been compiled only at the global level. For passenger and freight transport, the data on global CO_2 emissions are for 2017, as this is the latest year with robust data. Data on passenger activity (passenger-kilometres) and freight activity (tonne-kilometres) – provided mainly in the country fact sheets – are based on the latest available year, as indicated in the report analysis.

Information on greenhouse gas emissions – provided in CO_2 equivalent (CO_{2eq}) – include not only CO_2 but also methane, nitrous oxide, and industrial gases such as hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride.[2] These data are less up-to-date. As of 31 May 2021, data on greenhouse gas emissions were not readily available for the period 2019-2020. In some cases, additional data sources were used to provide detailed information about other climate pollutants besides CO_2.

All data on CO_2 and other greenhouse gas emissions, as well as CO_{2eq}, are provided in metric tonnes.

Data on car ownership

Information on car ownership rates is based on a global dataset from the International Organization of Motor Vehicle Manufacturers (OICA), with the latest release (as of 31 May 2021) dating from 2015.[3] Although newer information is available for some individual countries, using these data would hinder accurate global comparisons. Data on passenger and commercial vehicle sales were available only up to 2019.

Policy landscape data

The policy-related information presented in this report is not intended to be comprehensive. The data for the policy landscape indicators provided in Section 3 were gathered through desk research unless otherwise indicated. Barriers to accessing such information include language and limited availability of information through online media (e.g., websites, press releases and news articles).

Data in country fact sheets

Information in the fact sheets is based on desk research and on contributions from the national focal points. The data were collected to the best of the authors' knowledge and based on data availability, and thus may not be complete or show the most recent status. When no information was available for a given indicator, the term "Not available" is used.

Data gaps

Major data gaps exist in areas where there is no globally accepted data collection methodology. For example, the mapping of cycling and walking infrastructure is not currently done in all regions. Also, the modal share can be surveyed through different methods, leading to inconsistencies in available data. In addition, data on paratransit (informal transport), a predominant form of transport in many parts of the world, are largely lacking. This results in an incomplete picture of the impact of transport on climate change and sustainable development.

Methodological approach

Countries and regions

The report follows the M49 Standard of the United Nations Statistics Division.[4] In total, 196 countries have official United Nations membership and are also party to the United Nations Framework Convention on Climate Change. The available data have been put in a common structure for the United Nations member countries, regions and income groups to enable a consistent assessment. Income groups are based on the World Bank's classification of 2019.[5]

Economic calculations

The per capita and gross domestic product (GDP) calculations are based on the United Nations World Population Prospects 2019 and on World Bank GDP data using constant 2010 USD.[6]

Spatial and temporal scales

The geographic scale (global, national, city-level, etc.) as well as time scale (annual, monthly, daily) used in this report depends largely on the available dataset, as noted in the relevant figures and text. The detailed data forming the basis of the calculations and analysis are provided in the SLOCAT Transport Knowledge Base.[7]

Criteria for selection

The report covers policies, targets, emission reductions (achieved or envisioned) and market measures. To merit inclusion in the analysis, the policies, projects and trends must have been announced or completed between 2018 and 2020. Significant developments from January through May 2021 were included when deemed relevant, with the understanding that the next edition of the *Transport and Climate Change Global Status Report* will cover a period starting in 2021.

Pre- and post-COVID-19 pandemic trends

The year 2020 was pivotal for the world, and the COVID-19 pandemic has had substantial impacts on many of the transport trends monitored in this report. This edition attempts to differentiate between long-term trends and impacts due to the pandemic. To the extent possible, the analysis notes "pre-pandemic" (up to the end of 2019 or latest by February 2020) and "during pandemic" trends (starting in March 2020 until the end of 2020), as in some cases the pandemic led to reversals in long-term trends, at least for a specific period of time. In each section, a box describes the impacts that the pandemic has had on specific regions and sub-sectors.

Assembling the report

Global Strategy Team

This edition of the report was guided by a global strategy team consisting of 20 experts in the field who provided inputs over the span of six meetings between September 2019 and October 2020. Additionally, small group consultations were organised in February 2021, following the peer review process.

Authors and contributors

The report was collaboratively drafted by 22 authors and contributors from 16 organisations, led by the SLOCAT Secretariat. This includes additions and high-level inputs from the copy editor and from the special advisor who also co-authored the Executive Summary. Authors researched and compiled relevant facts and figures for the five sections of the report, including the Focus Features, with supporting review and inputs from several other organisations.

Peer review: A peer review process was carried out from 18 December 2020 to 20 January 2021 with 1,700 comments received from 74 reviewers. Each comment was individually reviewed by the SLOCAT Secretariat and considered in finalising the report.

National focal points: The report benefited from the contributions of voluntary national focal points, or experts from various regions and countries who have been essential to overcome language and information barriers. A public call for participation to provide information on policies and data resulted in several hundred initial registrations. Out of these registrations, 78 national focal points provided inputs through a first survey from 24 January to 3 February 2020; and through a second survey (focused on the country fact sheets) from 6 to 30 August 2020. All national focal points that contributed to the surveys are listed in the Acknowledgements.

Endnotes

1.1 Global Transport and Climate Change

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