MODULE 1 | 1.3.2

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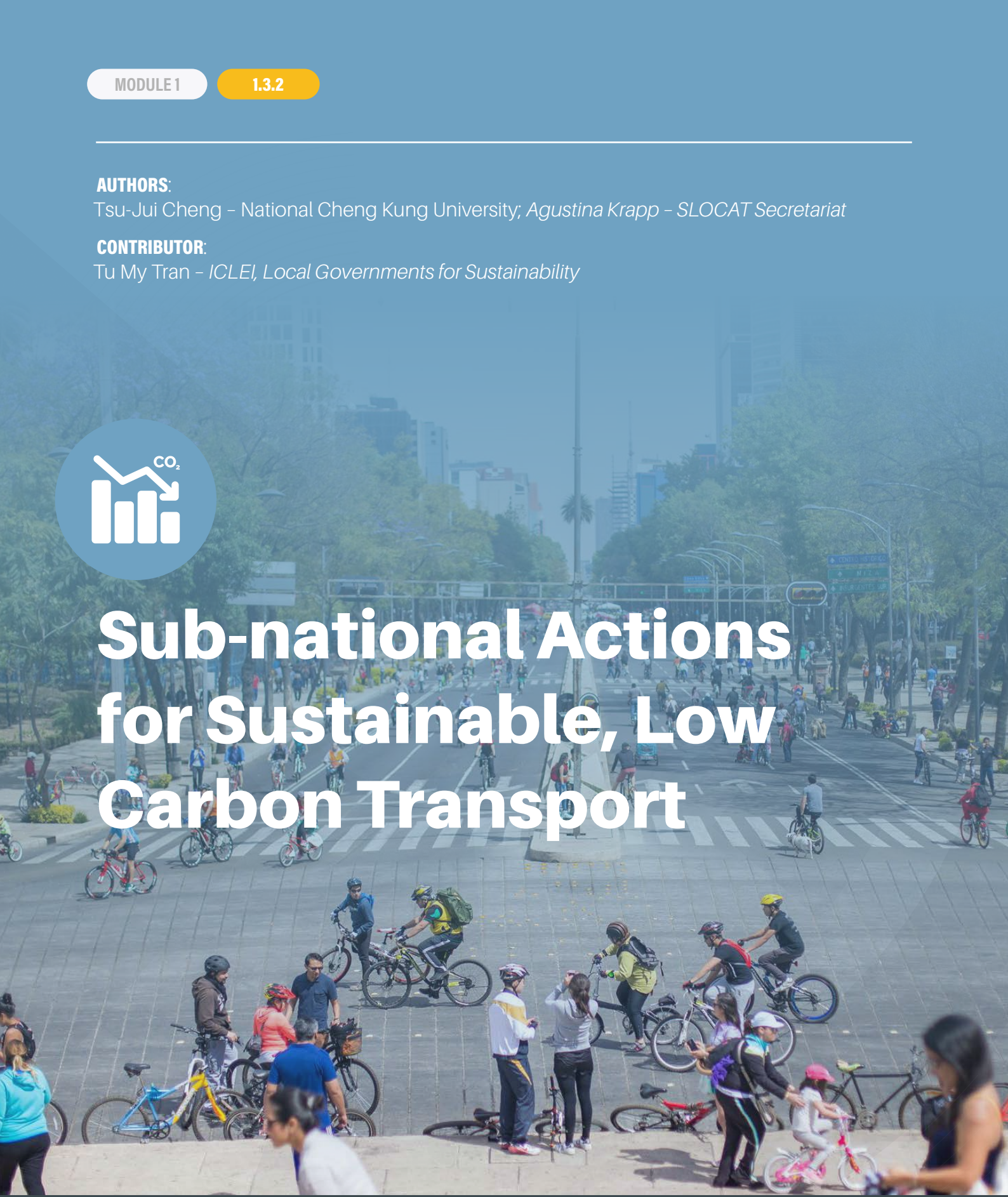
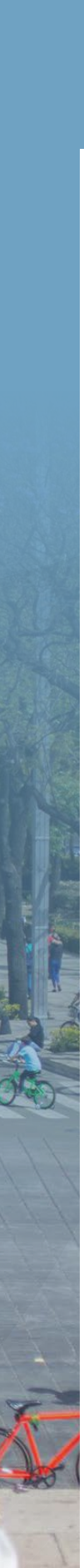


Sub-national Actions for Sustainable, Low Carbon Transport

SLOCAT Partnership on Sustainable, Low Carbon Transport

Transport, Climate and Sustainability
Global Status Report - 3rd edition



Key findings

Demand trends

- Cities exhibit a wide range of urban transport profiles, with modal shares varying greatly across locations.
- A 2021 study on 25 major cities worldwide found that London (UK), Madrid (Spain) and Paris (France) were the top cities for transport availability – boasting extensive railway connections, well-developed road networks, and ample cycling lanes and pedestrian infrastructure.
- The COVID-19 pandemic presented both threats and opportunities for sustainable transport and mobility in cities.

Emission trends

- Urban transport accounted for 8% of global carbon dioxide (CO_2) emissions and around 40% of global transport emissions in 2020. In the absence of interventions, motorised mobility in cities could surge 94% between 2015 and 2050.
- Transport emissions in cities rebounded after pandemic-related mobility restrictions were removed.
- Urban passenger transport remains the largest source of CO_2 emissions and pollutants in the transport sector, although these emissions vary widely by city and region. Across most cities, urban transport contributes between 20% and 60% of the total CO_2 emissions.
- Cities in Europe, North America and Oceania had the highest per capita greenhouse gas emissions from 1960 to 2012, ranging between 10 and 25 tonnes of CO_2 equivalent, two to five times the levels in Asian and African cities.
- Urban freight transport contributed 25% of transport-related CO_2 emissions and accounted for 30-50% of other transport-related pollutants in 2015.

Policy developments

- To tackle urban emissions, more sub-national governments are declaring commitments to net zero greenhouse gas emissions and/or unveiling sustainable development plans.
- As of April 2023, 1,148 cities were participating in the Race To Zero campaign, launched in 2020 to drive net zero commitments prior to the 2021 United Nations (UN) Climate Change Conference in Glasgow, United Kingdom (COP 26). Around 80% of sub-national governments that had joined the campaign had yet to set a net zero target as of 2023. Less than 1% of cities and 4% of regions had implemented legally binding targets, and around 9% of cities and regions had included net zero targets in their policy documents. However, there is a disparity among sub-national governments in their commitments to net zero targets.
- An estimated 65% of the UN Sustainable Development Goals (SDGs) will not be achieved unless sub-national governments are fully and equitably involved in implementation. Localising implementation of the SDGs is crucial to raise awareness and to accelerate engagement and commitment via a bottom-up approach.
- Transport is a central element reported in the 153 Voluntary Local Reviews (VLRs) submitted by sub-national governments between 2021 and April 2023; however, specific transport targets are not commonly mentioned.
- Several cities have reported in their VLRs comprehensive transport strategies that encompass mobility and transport planning. Across these VLRs, all cities emphasise the importance of public transport and active mobility in achieving climate action, equity, safety and resilience.
- When comparing the sub-national net zero targets with the VLRs, it becomes apparent that the complex and fragmented nature of the transport sector, with its multi-level delivery structure, poses challenges in establishing measurable targets.
- Alignment between national net zero targets (such as those included in Nationally Determined Contributions under the Paris Agreement) and sub-national net zero commitments, as well as VLRs, is currently not evident.
- The use of sustainable urban mobility plans (SUMPs), initially introduced in Europe, has since expanded to cities in various regions worldwide.

- Sub-national transport policies and investments have placed increased focus on active mobility and public transport, serving as "pull" or "carrot" approaches to encourage the adoption of zero- and low-emission transport modes.
- A growing number of cities have made available free or affordable public transport locally as a means to alleviate national economic crises (such as inflation) and to shift trips from private vehicles to public transport.
- Sub-national policy makers, particularly in Europe, also have embraced "push" or "stick" approaches – such as parking management and congestion charging – to alleviate congestion and redistribute urban space.
- Many urban areas have adopted and piloted access regulations, zero-emission zones and clear air zones to reduce emissions and improve air quality. A number of cities have established specific zero-emission zones for freight transport (ZEZ-Fs), ranging from urban delivery vans to medium- and heavy-duty trucks.
- There is growing momentum for sub-national governments to electrify bus fleets as a way to enhance the energy efficiency of public transport and car-sharing fleets.

Overview

Sub-national governments include all public authorities that are under the authority of a national government – such as municipalities, states, regions, provinces, counties and districts.[1] Sub-national governments are crucial in driving climate action and sustainability in the transport sector, mainly through implementing policies related to public transport, active mobility, transit-oriented development, parking regulation and access management (for example, through low- and zero-emission zones). Sub-national governments are fundamental to achieving national goals and turning national ambition into on-the-ground action.[2] As such, they can provide valuable insights and experience in implementing measures and empowering other actors.[3]

As of 2020, cities hosted more than half of the world's population and contributed 80% of the global gross domestic product (GDP); they also consumed more than two-thirds of the world's energy and contributed more than 70% of global carbon emissions.[4] The transport sector contributes nearly a quarter (23%) of global energy-related emissions, and urban transport accounts for 40% of these, of which three-quarters are released by private vehicles.[5] The share of the world's population living in cities is expected to rise to 80% by 2050, with associated growth in urban populations, economic activity and transport demand.[6]

Urban energy consumption and emissions are projected to increase as well, making cities central to achieving sustainable, low carbon transport systems worldwide. The high density and spatial concentration of urban populations and socio-economic activities allow for economies of scale, offering great potential to reduce the costs of infrastructure and services and to leverage more efficient and equitable transport modes such as walking, cycling and public transport.[7]

In general, alignment is lacking between national and sub-national targets for achieving net zero greenhouse gas emissions. However, some sub-national governments have implemented urban mobility plans or strategies to achieve sustainability impacts beyond the reduction of carbon emissions, many of which may be more tangible to citizens. These include air quality improvement, noise pollution reduction, road safety, mobility management and less congestion. Despite this, sub-national actors often face challenges in planning and implementing sustainable mobility measures; challenges include high population growth and urbanisation rates, limited decision making power, funding constraints, limited technical expertise and the ongoing impacts of the COVID-19 pandemic.

To overcome these challenges, regional and national governments around the world have developed a range of supportive policies. Additionally, global initiatives are bringing together sub-national actors and non-governmental stakeholders to facilitate peer exchanges, capacity building, technical support and access to financing. Increasingly, sub-national governments are deploying stronger regulations, economic incentives and infrastructure investments to promote sustainable transport modes.

Context and key challenges

Sub-national governments are crucial in driving climate action and sustainability in the transport sector. As such, they are fundamental to achieving national goals and turning national ambition into action. Key measures include policies related to public transport, active mobility, transit-oriented development, parking regulation and access management (e.g., low- and zero-emission zones). However, sub-national actors have differing degrees of decision making power depending on their autonomy, mandate and scope of responsibility. This may limit the elaboration and implementation of transport policies and plans due to a lack of co-ordination, funding, technical capacity, and political will, such challenges tend to be more pronounced in low- and middle-income countries.[8]

Population growth

With the global population projected to reach 9.7 billion by 2050, the demand for mobility is set to increase.[9] However, population growth will be uneven, expanding in some regions while stabilising or declining in others. By 2037, Central and Southern Asia is expected to become the most populous region, and by 2050 the population of Sub-Saharan Africa is projected to nearly double, contributing more than half of the total population growth.[10] In 2023, 30 out of the 34 megacities with populations above 10 million were in Asia, Latin America and Africa, and by 2030 the number of megacities is expected to increase to 43 worldwide.[11]

Funding constraints

Implementing sustainable mobility measures in developing cities requires substantial investments, but often the available funding is insufficient. For example, inadequate revenue collection from the users of transport systems can lead to a reliance on subsidies. Additionally, budget allocations tend to favour the expansion of road infrastructure, benefiting car owners and perpetuating car-centric transport. The minimal contributions from car users towards infrastructure investments further exacerbate the funding challenge.[14]

Differences among sub-national governments

Sub-national governments that have greater autonomy also have more flexibility in implementing sustainable mobility measures. In contrast, those with limited autonomy rely heavily on national support to develop and execute plans towards net zero emissions.[12] Relationships between sub-national and national governments can vary greatly depending on factors such as constitutional arrangements, party politics, competitive dynamics and the willingness to collaborate.[13]

Limited technical expertise

Access to capacity development programmes is essential to promote sustainable urban mobility and ensure inclusive development. Sub-national governments may lack the technical knowledge and capacity to plan and implement sustainable mobility measures. In many cases, as sub-national governments in high-income countries advance various efforts to decarbonise transport, their counterparts in low- and middle-income countries are facing challenges simply co-ordinating transport-specific policies and plans, let alone ensuring effective implementation and sustainability measures.[15] (*See Spotlight 6. Capacity and Institutional Support to Achieve Sustainable, Low Carbon Transport*).

Demand trends

Cities exhibit a wide range of urban transport profiles, with modal shares varying greatly across locations.

- In Tshwane and Cape Town (South Africa) and Auckland (New Zealand), private cars accounted for more than 80% of trips as of 2022.[16]
- Zurich (Switzerland) and Tokyo (Japan) have the highest shares of public transport, at 35% and 28%, respectively.[17]
- Dar es Salaam (Tanzania) and Kinshasa (Democratic Republic of the Congo) rely heavily on walking as the primary transport mode, representing two-thirds of all trips.[18]
- Cycling represents a high share of trips in Amsterdam (Netherlands), at 28.7%, and Osaka (Japan), at 28.4%.[19]
- In some cities in Sub-Saharan Africa, informal transport (such as Dakar (Senegal) and Dar es-Salaam (Tanzania)) accounts for up to 95% of all trips.[20]

A 2021 study on 25 major cities worldwide found that London (UK), Madrid (Spain) and Paris (France) were the top cities for transport availability – boasting extensive railway connections, well-developed road networks, and ample cycling lanes and pedestrian infrastructure.[21]

- However, in a 2018 study on the average cost for public transport (bus, tram or metro), London had the highest costs (USD 5.66), followed by Stockholm (Sweden) (USD 5.43), Copenhagen (Denmark) (USD 4.64) and Oslo (Norway) (USD 4.49).[22]
- Cities with the lowest average costs were Cairo (Egypt) (USD 0.11), followed by Kyiv (Ukraine) (USD 0.18), Mumbai (India) (USD 0.23), Jakarta (India) (USD 0.26) and Mexico City (USD 0.29).[23]
- A few cities, including Valletta (Malta), Luxembourg City, and Tallinn (Estonia), offered free public transport options as of 2023 (*see Section 3.1 Integrated Transport Planning*).[24]

The COVID-19 pandemic presented both threats and opportunities for sustainable transport and mobility in cities. By 2021, congestion had returned to pre-pandemic levels in many cities, and in some places it worsened.[25]

- In 2020, all of the top ten cities for pre-pandemic metro ridership experienced at least a 27% drop in ridership: Tokyo (Japan), Moscow (Russian Federation), Shanghai (China), Beijing (China), Seoul (Republic of Korea), Guangzhou (China), Delhi (India), New York City (USA), Mexico City and Hong Kong (China).[26]
- By 2022, traffic delays exceeded pre-pandemic levels in 39% of US urban areas and 42% of European urban areas.[27]
- The pandemic fast-tracked the cycling agenda by presenting an opportunity to rapidly construct pop-up bike lanes, which contributed to 11-48% more cycling in 106 European cities during March to July 2020.[28]

Emission trends

Urban transport accounted for 8% of global carbon dioxide (CO^2) emissions and around 40% of global transport emissions in 2020.[29] **In the absence of interventions, motorised mobility in cities could surge 94% between 2015 and 2050.**[30]

CO_2 emissions from transport grew nearly 2% annually on average between 2010 and 2019, faster than from any other end-use sector globally.[31] Transport CO_2 emissions fell 13% in 2020 due to the impacts of the COVID-19 pandemic, then jumped 7% in 2021 as mobility restrictions were lifted.[32] (*For more on emission trends, see Section 1.1 Transforming Transport and Mobility to Achieve the Targets of the Paris Agreement and the Sustainable Development Goals).*

Transport emissions in cities rebounded after pandemic-related mobility restrictions were removed. According to Google Environmental Insights Explorer, as of 2022 public transport trips globally had not yet returned to 2019 levels, whereas private vehicle trips had increased.[33]

Urban passenger transport remains the largest source of CO_2 emissions and pollutants in the transport sector, although these emissions vary widely by city and region.[34] **Across most cities, urban transport contributes between 20% and 60% of the total CO_2 emissions.** [35]

- According to C40, a third of the total urban greenhouse gas emissions in some major cities worldwide come from transport.[36]
- In some cities in Latin America and the Caribbean (LAC) region, such as Guadalajala (Mexico), São Paulo (Brazil) and Quito (Ecuador), the share of transport CO_2 emissions exceeds 60%, due mainly to higher levels of urbanisation and motorisation.[37]
- In cities in low- and middle- income countries, the shares of transport CO_2 emissions are relatively, lower, although these emissions are growing rapidly, driven by economic development.[38]

Cities in Europe, North America and Oceania had the highest per capita greenhouse gas emissions from 1960 to 2012, ranging between 10 and 25 tonnes of CO_2 equivalent, two to five times the levels in Asian and African cities.[39] Cities in Asia and Africa had per capita emissions below 5 tonnes of CO_2 equivalent per capita.[40]

Urban freight transport contributed 25% of transport-related CO_2 emissions and accounted for 30-50% of other transport-related pollutants in 2015.[41]

Policy developments

To tackle urban emissions, more sub-national governments are declaring commitments to net zero greenhouse gas emissions and/or unveiling sustainable development plans. These commitments highlight the significance of climate change on their political agenda. Local sustainable development plans underscore the importance of sustainable mobility strategies as a key component of actions at the sub-national level.

As of April 2023, 1,148 cities were participating in the Race To Zero campaign, launched in 2020 to drive net zero commitments prior to the 2021 United Nations (UN) Climate Change Conference in Glasgow, United Kingdom (COP 26).[42] These include 482 cities from Western Europe, 406 from Latin America and the Caribbean, 182 from Asia-Pacific, 43 from Eastern Europe, and 32 from Africa, among others.[43] These cities adhere to the "Starting Line" criteria, which entails "Pledge, Plan, Proceed, Publish and Persuade."[44]

Around 80% of sub-national governments that had joined the Race To Zero campaign had yet to set a net zero target as of 2023.[45] **Less than 1% of cities and 4% of regions had implemented legally binding targets, and around 9% of cities and regions had included net zero targets in their policy documents.**[46]

As of June 2023, the Net Zero Tracker – which evaluates the net zero targets established by Parties to the UN Framework Convention on Climate Change, by other regions and territories, and by cities with populations exceeding 500,000 – revealed that 146 out of 709 regions and 252 out of 1,186 cities had included net zero commitments or similar objectives in their policy documents (see Figures 1 and 2).[47]

However, there is a disparity among sub-national governments in their commitments to net zero targets. For example, as of June 2023 none of the 138 regions in Western and Central Asia had set net zero targets, and Europe had 152 regions without net zero targets (see Figure 3).[48] At the city level, most cities in Africa, East Asia, South Asia, and Western and Central Asia (in the range of 84% to 92% of cities) had yet to establish net zero targets (see Figure 4).[49] In general, information is lacking about how transport decarbonisation is reflected in these commitments.

An estimated 65% of the UN Sustainable Development Goals (SDGs) will not be achieved unless sub-national governments are fully and equitably involved in implementation.[50] **Localising implementation of the SDGs is crucial to raise awareness and to accelerate engagement and commitment via a bottom-up approach.**[51] The 2030 Agenda for Sustainable Development and its 17 SDGs provide an opportunity and platform for sub-national governments to highlight their contributions to achieve the SDGs through the submission of Voluntary Local Reviews (VLRs).[52]

Transport is a central element reported in the 153 VLRs submitted by sub-national governments between 2021 and April 2023; however, specific transport targets are not commonly mentioned.[53] Amsterdam (Netherlands) stands out for its active efforts to achieve emission-free traffic within the

FIGURE 1. Number of regions committing to net zero targets, as of June 2023

Source: See endnote 48 for this section.

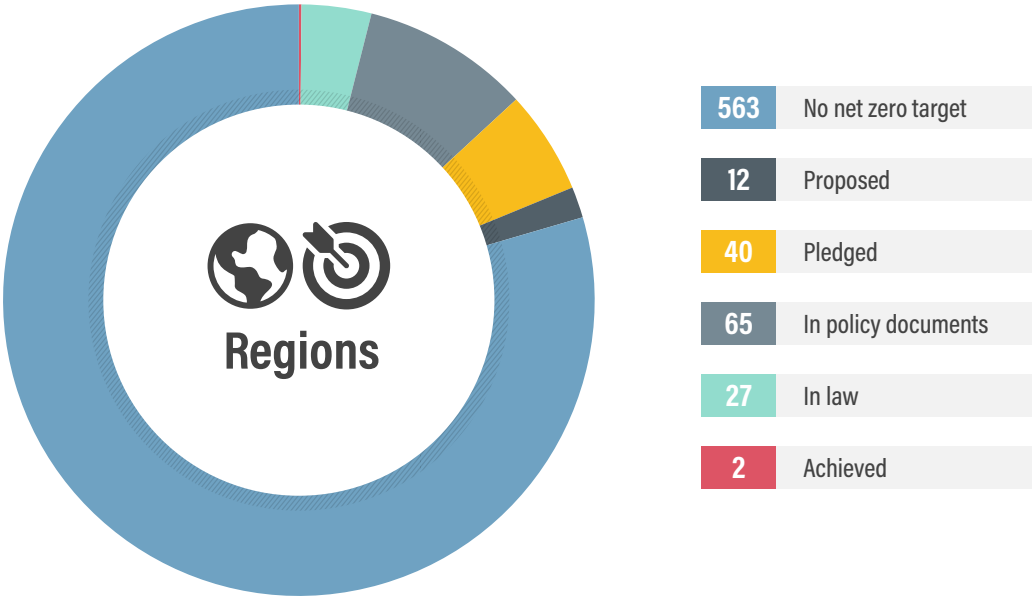
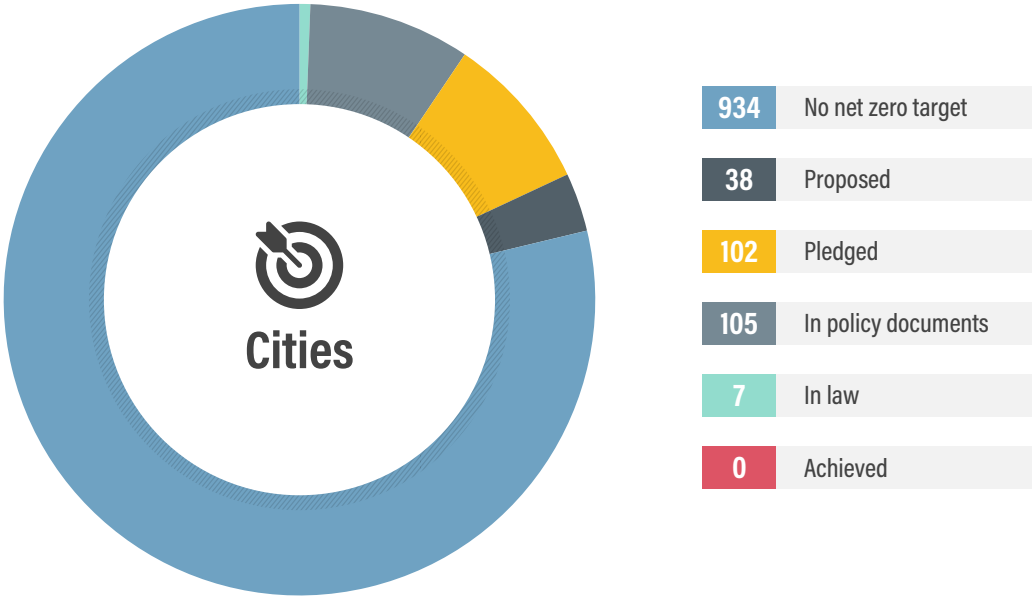


FIGURE 2. Number of cities committing to net zero targets, as of June 2023

Source: See endnote 48 for this section.



city by 2030, with the aim of staying within the World Health Organization's threshold for average annual concentrations of particulate matter (PM_{10} and $PM_{2.5}$).[54] Helsinki's VLR highlights the significant challenges in mitigating urban transport emissions, indicating that city-wide carbon neutrality targets in 2030 will not be met under the current climate actions.[55]

Several cities have reported in their VLRs comprehensive transport strategies that encompass mobility and transport planning. Across these VLRs, all cities emphasise the importance of public transport and active mobility in achieving climate action, equity, safety and resilience. Noteworthy examples include the urban mobility plans or strategies implemented in Barcelona (Spain), Malmö (Sweden), Melbourne (Australia), Tampere (Finland), and Winnipeg (Canada), as well as in the German cities of Bonn, Dortmund, Dusseldorf and Kiel. Other examples are the plans established in cities in the State of Pará (Brazil) and in the Lombardy Region (Italy), as well as the Sustainable Mobility Bill for the Basque Country (Spain).

The VLRs show that sustainable mobility offers benefits that are often more tangible to citizens than reducing carbon emissions. These include improved air quality, reduced noise pollution, enhanced road safety, and increased accessibility, among others. Even sub-national governments that do not explicitly reference urban mobility plans in their VLRs consistently recognise the significance of active mobility and public transport and the integration of sustainable mobility within regional and municipal urban planning as vital measures for environmental and social sustainability.

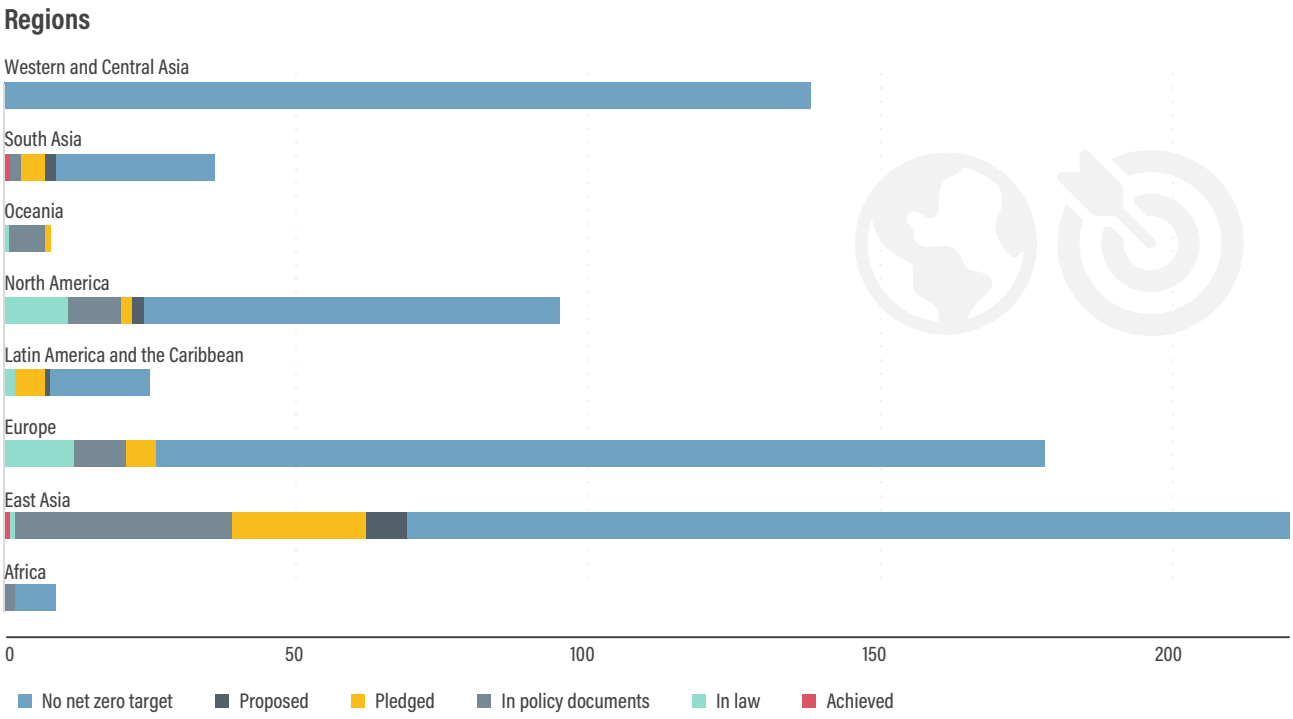
When comparing the sub-national net zero targets with the VLRs, it becomes apparent that the complex and fragmented nature of the transport sector, with its multi-level delivery structure, poses challenges in establishing measurable targets.[56] These challenges impede the capacity of sub-national governments to commit effectively to net zero targets and to adopt measures that can address the rising demand for urban mobility while minimising environmental impacts and promoting sustainable development.

Alignment between national net zero targets (such as those included in Nationally Determined Contributions under the Paris Agreement) and sub-national net zero commitments, as well as VLRs, is currently not evident.[57] Nonetheless, sub-national governments are in a favourable position to enhance climate actions vertically across different levels of government and horizontally across cities.[58] Various planning tools, case studies, precedents, and political and financial instruments are available or have been developed to facilitate sustainable transport options. Despite the lack of specific targets in the urban transport sector, sub-national governments have taken steps to address transport challenges that directly or indirectly contribute to reducing emissions.

National governments worldwide have recently developed policy frameworks and guidelines, such as national urban mobility policies and investment programmes (NUMPs), to help sub-national governments plan and implement sustainable urban mobility strategies.[59]

FIGURE 3. Number of regions committing to net zero targets, as of June 2023

Source: See endnote 49 for this section.



The use of sustainable urban mobility plans (SUMPs), initially introduced in Europe, has since expanded to cities in various regions worldwide. The aim of SUMPs is to meet the mobility needs of people and businesses in urban areas and their surroundings for a better quality of life (*see Section 3.1 Integrated Transport Planning*).

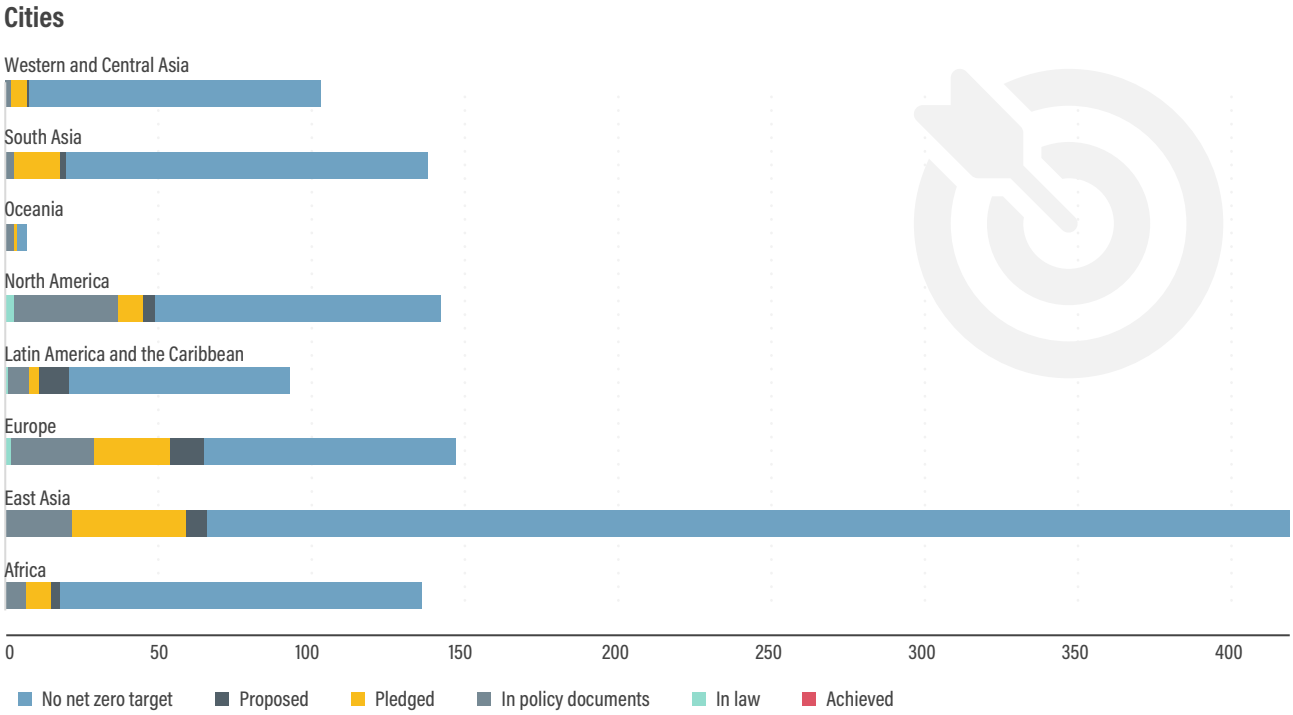
- In 2021, the European Commission released the EU Urban Mobility Framework to help cities make urban mobility more sustainable and to contribute to achieving the EU greenhouse gas reduction targets. The framework suggests measures for addressing air pollution, congestion, accessibility, urban road safety, e-commerce growth and other urban mobility challenges.[60]
- In early 2023, the European Commission released a Recommendation to Member States to establish national programmes to support cities in developing SUMPs through guidance materials, training, technical expertise and financial support.[61]
- In early 2022, Istanbul (Türkiye) completed the country's first SUMP, which was also the first SUMP in a megacity globally, covering a population of nearly 16 million.[62]
- Several initiatives were under way in India by late 2022 to support transit-oriented development, and the cities of Chandigarh, the Pune Municipal Corporation and Navi Mumbai had successfully implemented transit-oriented development in their urban planning masterplans.[63]
- Open street events held across Africa – including in Cape Town (South Africa), Kigali (Rwanda) and several Ethiopian cities – provided cities with an opportunity to reflect on and understand the benefits of people-centred development approaches.[64]

Sub-national transport policies and investments have placed increased focus on active mobility and public transport, serving as "pull" or "carrot" approaches to encourage the adoption of zero- and low-emission transport modes. The need for active mobility options, such as walking and cycling, has continue to grow even after the COVID-19 pandemic, driven mainly by local demand (see *Sections 3.2 Walking, 3.3 Cycling* and *3.4.1 Public Transport*).

- In 2022, Jakarta (Indonesia) completed 309 kilometres of bike lanes, out of a planned total of 500 kilometres, with government data showing that the average number of cyclists daily in the city had surged from 47 in 2005 to 4,000 in 2022.[65]
- In Utrecht (Netherlands), the cycling action plan outlined in the SUMP helped create a strong cycling culture, resulting in Utrecht topping the Global Bicycle Cities Index in 2020 and 2022 and ranking in the top three on the "Copenhagenize Index" of the world's most cycle-friendly cities since 2013.[66]

FIGURE 4. Number of cities committing to net zero targets, as of June 2023

Source: See endnote 50 for this section.



- In 2020, Addis Ababa (Ethiopia) launched a 10-year Non-Motorised Transport Strategy aimed at developing a comprehensive network of high-quality walking and cycling facilities to address the growing demand for better access to the city.[67]

A growing number of cities have made available free or affordable public transport locally as a means to alleviate national economic crises (such as inflation) and to shift trips from private vehicles to public transport.

- Many cities in Brazil Europe and the USA have trialled and/or fully implemented free ticketing and fares for public transport.[68]
- All public transport is free in Morungaba (Brazil).[69]
- In the United States, Albuquerque has implemented free buses, Worcester operated free buses during the summer of 2023, and Washington, D.C. enacted a zero-fare bus bill in 2023.[70]

Sub-national policy makers, particularly in Europe, also have embraced "push" or "stick" approaches – such as parking management and congestion charging – to alleviate congestion and redistribute urban space.

- In March 2023, Barcelona (Spain) implemented the Amazon tax, which charges postal operators for parking vehicles that deliver online purchases in public spaces. The tax affects the 26 postal companies, including Amazon, DHL and UPS, that bill more than EUR 1 million (USD 1.09 million) annually.[71] The tax seeks to benefit local business, encourage collecting at pick-up points, avoid excessive occupation of public space by delivery vehicles, and fight other negative impacts.[72]
- In July 2023, the Rosemont–La Petite-Patrie district in Montreal (Canada) introduced parking charges based on vehicle weight to reflect better the space they occupy.[73] Lyon (France) will implement a similar approach in 2024.[74]
- In 2023, London marked the 20th anniversary of its congestion charge, which reduced congestion 30% and emissions 16% since 2003, limiting traffic and contributing to a shift to active travel and public transport.[75] The city plans to remove its congestion pricing exemption for electric vehicles by 2025.[76] Between 2000 and 2022, London's congestion charge resulted in 1 billion fewer vehicle-miles driven by cars; however, the number of vehicle-miles driven by light commercial vehicles increased by the same amount, and taxis also filled the space left by cars.[77]

Many urban areas have adopted and piloted access regulations, zero-emission zones and clear air zones to reduce emissions and improve air quality. A number of cities have established specific zero-emission zones for freight transport (ZEZ-Fs), ranging from urban delivery vans to medium- and heavy-duty trucks.

- The zero-emission zone in Oslo (Norway), scheduled to enter into force in 2023, commenced with a "Car-Free City Life" area where pedestrians and cyclists have priority over private cars; the measure is set to expand to other areas of the city by 2026.[78]
- Jakarta (Indonesia) began implementing a low-emission zone pilot project in the Kota Tua Tourism Area in early 2021, addressing air quality, safety and social inclusion issues.[79]
- A ZEZ-F pilot in Shenzhen (China), implemented in 2018 to cover 22 square kilometres (1.1% of the total city area), applies to light-duty trucks and was scheduled to expand in July 2023.[80] In 2021, Luoyang (China) adopted a near-ZEZ-F scheme, to be implemented in 2023, that applies to urban delivery trucks and covers the city centre.[81]
- In the US state of California, the Los Angeles Cleantech Incubator and the City of Santa Monica partnered to deploy the country's first ZEZ-F in early 2021, referred to as a "zero-emission delivery zone" and covering a one-square-mile commercial area.[82]
- The Netherlands announced in 2021 that it was aiming to implement ZEZ-Fs in 30-40 of the country's largest cities by 2025.[83] As of 1 January 2025, any city in the Netherlands would be permitted to designate areas as a ZEZ-F.[84]

There is growing momentum for sub-national governments to electrify bus fleets as a way to enhance the energy efficiency of public transport and car-sharing fleets (*see Section 4.2 Vehicle Technologies*).

- At least 75 cities have joined the Accelerating to Zero (A2Z) Coalition, launched at COP 26 in 2021 to accelerate the transition to 100% zero-emission cars and vans; the aim is for all sales of new cars and vans to be zero-emission globally by 2040, and by no later than 2035 in leading markets.[85]
- Maharashtra state (India) planned to add a total of 1,900 electric buses to Mumbai's Brihanmumbai Electric Supply and Transport fleet (a public entity providing transport services and electricity).[86] The city also aims to have a 100% electric fleet by 2027, with an interim 50% target by 2023.[87]
- In 2021, California (USA) approved the Clean Miles Standard, the first programme in the country requiring ride-hailing companies to transition towards electric vehicles by 2030.[88]
- São Paulo (Brazil) banned bus companies from purchasing new diesel buses starting in 2020 and targets at least 2,600 e-buses by 2024, representing around one-fifth of the fleet.[89]
- In 2022, Bogotá (Colombia) expanded its e-bus fleet and built the largest bus depot outside of China.[90] With all 1,485 of the city's e-buses in service, annual avoided emissions are projected to reach 94,300 tonnes of CO_2.[91]

Partnership in Action

SLOCAT partners engaged in dozens of actions during 2020-2022, including:

- By mid-2022, 36 cities (mostly in Europe and the United States) had committed to the **C40 Cities Green and Healthy Streets Declaration**, aiming for zero emissions in a major area of their cities by 2030; establishing a zero-emission zone is a clear pathway to reaching that commitment.[92]
- The **EcoLogistics** project of **ICLEI–Local Governments for Sustainability** promotes low-carbon urban freight policies and practices.[93] For example, in 2022 Rosario (Argentina) added 20 cargo bikes to its public bike sharing scheme, targeting merchants, entrepreneurs and workers in the city centre.[94]
- In April 2022, the **International Association of Public Transport (UITP)**, the **World Bank** and the **World Resources Institute** supported India to bid more than 5,000 electric buses for five cities, in the world's largest tender for e-bus procurement. The process, supported under the government FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicle) scheme subsidy, aggregated demand across Delhi, Bangalore, Hyderabad, Kolkata and Surat and homogenised their procurement specifications. As a result of the large size of the tender, prices were the lowest ever (up to 48% below previous tenders), very close to those for diesel buses.[95] The government now plans to procure 50,000 e-buses by 2030 for other cities.[96]
- The **Institute for Transportation and Development Policy**, in partnership with the City of Kigali (Rwanda), developed a Non-Motorised Transport Master Plan in 2023 that identifies priority corridors for greenways and active transport in the city.[97]
- Since its launch in 2015, the **MobiliseYourCity** partnership has been supporting cities in different regions in developing and implementing SUMPs.[98] These include three cities in Africa, two cities in Asia, four cities in Eastern Europe and six cities in Latin America and the Caribbean that finalised their SUMPs between 2019-2022; as well as seven cities in Africa, seven cities in Asia and three cities in Latin America and the Caribbean that are currently developing their plans.[99]
- The **World Bank** is providing financial and/or technical assistance to bus rapid transit projects in eight African cities as part of their SUMPs: Abidjan (Côte d'Ivoire), Dakar (Senegal), Dar es Salaam (Tanzania; phases 3 and 4), Douala (Cameroon), Kampala (Uganda), Kumasi (Ghana), Maputo (Mozambique) and Ouagadougou (Burkina Faso).[100] In Dakar, the introduction of low- or zero-emission vehicles in this bus corridor could save an estimated 67,700 tonnes of CO_2 annually.[101]

1.3.2
SUB-NATIONAL ACTIONS FOR SUSTAINABLE, LOW CARBON TRANSPORT

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