SLOCAT
Partnership on Sustainable, Low Carbon Transport

Transport and Voluntary National Reviews 2020

Action for Achieving the Sustainable Development Goals

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Alice Yiu, Maruxa Cardama, Christopher Dekki, Shivam Ghai, Emily Hosek

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Introduction

Sustainable, low carbon mobility is a powerful driver for positive, systemic transformation of our societies. This transformation is outlined in the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), the global 'blueprint to achieve a better and more sustainable future for all by 2030'. The 2030 Agenda was designed to be a cross-cutting and interconnected agenda, with the achievement of one SDG often dependent on the achievement of a series of others. While sustainable, low carbon transport and mobility is not represented by a stand-alone SDG, its successful implementation supports the achievement of almost every SDG.

Enabling sustainable, low carbon transport and mobility worldwide has explicit as well as implicit implications for the success of the entire 2030 Agenda, with social, environmental and economic 'multiplier effects' that go well beyond the scale of financial investment. Some areas where transport has the greatest positive impacts include: ending poverty (SDG 1); ending hunger (SDG 2); promoting healthy lifestyles and well-being (SDG 3); empowering women and girls (SDG 5); ensuring sustainable and modern energy (SDG 7); building resilient infrastructure (SDG 9); making cities sustainable (SDG 11) and taking action to combat climate change and its impacts (SDG 13).

2030 Agenda for Sustainable Development

Transforming our World: the 2030 Agenda for Sustainable Development was adopted in September 2015 by Heads of State and Government at the United Nations (UN) Sustainable Development Summit. The Agenda includes 17 SDGs and 169 targets and is a commitment to eradicate poverty and achieve sustainable development by 2030 world-wide, ensuring that no one is left behind. The adoption of the 2030 Agenda was a landmark achievement, providing for a shared global vision towards sustainable development for all.

The 2030 Agenda states that 'sustainable transport systems, along with universal access to affordable, reliable, sustainable and modern energy services, quality and resilient infrastructure, and other policies that increase productive capacities, would build strong economic foundations for all countries'.[1]

1 United Nations, (2015). Transforming our world: the 2030 Agenda for Sustainable Transport.

Figure 1: SLOCAT Wheel on Transport and the SDGs

The SLOCAT Wheel on Transport and the SDGs (Figure 1) aims to articulate the breadth of positive interactions between sustainable, low carbon transport and mobility and the 2030 Agenda. The four identified cross-cutting themes — Equitable, Healthy, Green and Resilient — present these interactions. Under each theme, fundamental notions related to socio-economic and environmental systems on which sustainable, low carbon transport can affect positive change are highlighted.

The analysis is complemented by a detailed list of targets (Figure 2) across all SDGs for which action on sustainable, low carbon transport and mobility has the strongest impact. This analysis also includes the transport-relevant indicators (Figure 3) used to assess advancement towards some of these targets in the framework of official 2030 Agenda monitoring efforts.

Figure 2: Detailed list of tra

Equitable

Poverty and vulnerable situations

1.1 Eradicate extreme poverty
1.2 Reduce poverty
1.4 Ensure equal access to basic services
1.5 Build the resilience of the poor and those in vulnerable situations
10.2 Empower social, economic and political inclusion
11.2 Provide access to safe, affordable, accessible and sustainable transport systems

Women's and girls' empowerment

5.1 End all forms of discrimination against women and girls everywhere
5.5 Ensure women's full and effective participation

Productivity and jobs

8.2 Achieve higher levels of productivity
8.3 Promote development-oriented activities, job-creation, entrepreneurship, creativity and innovation
8.5 Achieve full and productive employment and decent work

Human rights and access to services

2.1 Ensure access by all people to food
3.1 Reduce global maternity mortality
4.5 Ensure equal access to all levels of education
6.1 Achieve universal access to water

Planning, infrastructure, finance, innovation

1.b Create pro-poor and gender sensitive development strategies
2.a Increase investment in rural infrastructure
9.1 Develop quality, reliable, sustainable and resilient infrastructure with a focus on access for all
11.3 Enhance integrated, participatory urban planning
11.a Support positive urban-rural linkages

Green

Environment

6.3 Improve water quality by reducing pollution
8.4 Decouple economic growth from environmental degradation
11.6 Reduce urban air quality impacts
13.2 Integrate climate change measures into national policies, strategies and planning
13.3 Improve education and capacity on climate change mitigation
14.1 Reduce marine pollution
15.5 Reduce the degradation and loss of natural habitats and biodiversity

Energy

7.2 Increase renewable energy
7.3 Improve energy efficiency
7.b. Expand infrastructure for sustainable energy services for all in developing countries
12.c Rationalise inefficient fossil fuel subsidies

Circular economy

9.4 Upgrade infrastructure and industries to make them clean, sustainable and resource-efficient
11.b Implement policies and plans for resource efficiency and mitigation in cities
12.3 Reduce food loss and waste
12.6 Adopt corporate sustainable practices and report on them
12.8 Ensure awareness of lifestyles in harmony with nature

Transport-Releva

3.6.1 Road safety
Tier I
Death rate due to road traffic injuries

9.1.2 Transport infrastructure
Tier I
Passenger and freight volumes, by mode of transport

Figure 3: Transport-relevant SDG indicators

Healthy

Health and well-being

2.1 End hunger and ensure access to food
3.3 Combat and end epidemics and communicable diseases
3.d Strengthen capacity for management of health risks particularly for developing countries
11.7 Provide universal access to green and public spaces

Safety and security

3.6 Reduce deaths from road traffic accidents
5.2 Eliminate all forms of violence against women and girls

Air quality

3.9 Reduce number of deaths and illnesses from pollution

Resilient

Socio-economic resilience

1.5 Build resilience to climatic events and environmental shocks
8.9 Promote sustainable tourism
9.1 Develop resilient infrastructure for human well-being
9.a Facilitate resilient infrastructure in developing countries

Resilience to global shocks

3.3 End epidemics and combat communicable diseases
3.d Strengthen capacity for early warning and management
11.5 Decrease economic losses caused by disasters
11.b Develop holistic disaster risk management strategies
13.1 Strengthen resilience and adaptive capacity to climate-related hazards
13.2 Integrate climate change measures into national policies, strategies and planning
13.3 Improve education and capacity on climate change adaptation and early warning

nt SDG Indicators

9.1.1 Tier II
Rural access
Proportion of the rural population who live within 2 km of an all-season road

11.2.1 Tier II
Public transport
Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities

Since the inaugural UN High-Level Political Forum on Sustainable Development (HLPF) in 2016, SLOCAT has been assessing transport references in the Voluntary National Reviews (VNRs). The assessment found that countries have been reporting on transport as a vital sector to implement the SDGs, showcasing on-the-ground implementation and best practices. Through the VNRs, countries have contributed to offering leverage and momentum for the transport sector to move along a more sustainable path.[2]

Nevertheless, in 2020, unprecedented challenges emerged which are causing significant setbacks to the achievement of the SDGs in the transport sector. The COVID-19 pandemic is sending a shock wave through societies worldwide and is permanently changing livelihoods as we know it: Our global economy has been severely disrupted - from supply chains and markets to workers, social protection floors and international trade - laying bare the weaknesses of our overall preparedness for disasters and global shocks. In many cities, public transport systems are pressured to the verge of collapse, having seen a significant decrease in ridership, revenue and passenger trust. Out of hygienic concerns, lots of people have returned to private vehicles as their first choice of mobility. Without provisions of safe and reliable transport services, many are stranded by the lockdown and deprived of work to maintain their livelihoods, causing even worse impoverishment to the most vulnerable groups.

At the same time, the pandemic has pushed us to reflect on how we move people and goods, as well as what this will mean for the future of transport: appreciating cleaner air and less noise pollutions due to reduced traffic; reclaiming streets for pedestrians and cyclists; adopting cost-efficient tactical urbanism measures that enable active mobility and depending more and more on freight and logistics as people have turned to online deliveries at an unprecedented pace.

Despite the challenging circumstances, 47 countries succeeded in finalising their VNRs and presenting them virtually at the HLPF 2020. Many VNRs expressed concerns that the pandemic has impacted on and will continue to hinder the implementation of the SDGs and disrupt development efforts in the short-term.

SDGs review mechanism

The High-level Political Forum on Sustainable Development (HLPF) is the UN's apex body on sustainable development. It has a central role in the follow-up and review of the 2030 Agenda and the SDGs at the global level. The Forum has been convening annually under the auspices of the Economic and Social Council (ECOSOC) since 2016, and every four years under the auspices of the General Assembly; last time in 2019.

The 2030 Agenda encourages UN member states to 'conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country-led and country-driven'.[3] This mechanism, known as the Voluntary National Review (VNR), aims to facilitate the sharing of experiences among countries, including successes, challenges and lessons learned, with a view to accelerating the implementation of the 2030 Agenda.

'Due to the suspension of public passenger transport, air transport and the ban on crossing municipal borders, traffic in Slovenia largely stopped [during the pandemic]. This certainly contributed to a reduction in CO_2 emissions. Although this is a rather accidental consequence of the measures introduced, it can contribute to reflection on the real needs regarding day-to-day transport and potential investment in sustainable mobility.'

VNR of Slovenia (2020)[4]

2 Previous assessments conducted by SLOCAT on the VNRs are available here.

3 United Nations, (2015). Transforming our world: the 2030 Agenda for Sustainable Transport.

4 Implementation of the Sustainable Development Goals: Second Voluntary National Review of Slovenia (2020).

While the world grapples with successive pandemic waves and tries to define how recovery should look like, the SLOCAT Partnership seeks to empower change-makers to ensure the economic viability of, the affordable access to, and the right investments in sustainable, low carbon transport and mobility services and infrastructure as a vital piece to green, equitable recovery.

The global pandemic is shining a light on the inextricably linked social, economic and environmental issues our societies must crucially address to resolve prevailing inequality and climate action challenges. Recovery measures must not derail us from achieving the SDGs and the goals of mobility for an equitable 1.5°C Planet. This is the time for international, national and sub-national regulatory and investment frameworks to enable the transformative force of passenger and freight transport decarbonisation measures, in full alignment with the SDGs and the objectives of the Paris Agreement. The decisions governments and multilateral entities are making to support pandemic recovery will determine the degree of transformation we will achieve through the next decade. The urgency of the decisions being taken must not derail us from achieving universal equitable access to mobility; either from ambitious systemic decarbonisation across land transport, shipping and aviation. We need clear messages and transparent monitoring mechanisms on the types of investments that represent the best value for money and will give us the greatest improvement in equitable access, jobs generation and reduced emissions.

Transport references in SDGs reviews

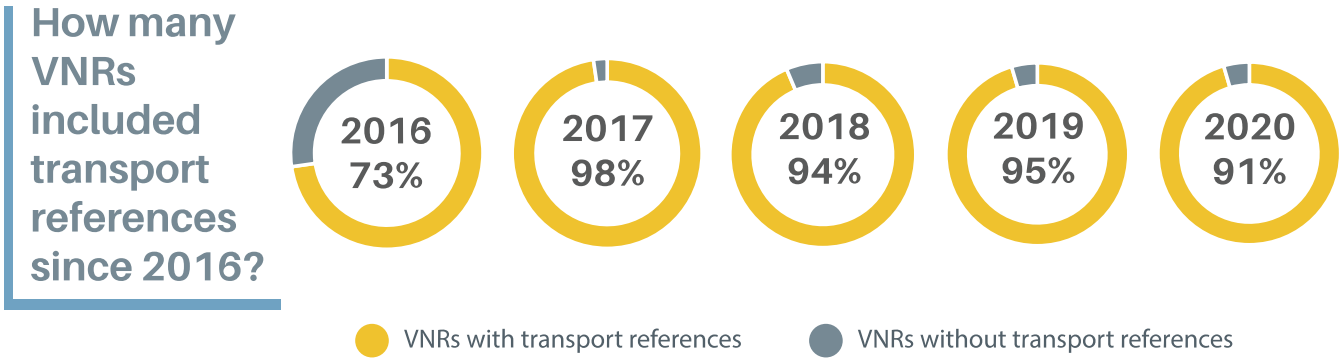


Figure 4: % of VNRs with transport references (2016 - 2020)

47 countries presented their VNRs at HLPF 2020,[5] out of which 26 countries were first timers, 20 countries submitted for the second time and one submitted for the third time. Similar to previous years, the 2020 VNRs presented a rich reference to sustainable transport policies and measures to realise the SDGs amidst the crisis and demonstrated the countries' continual commitment to implement the 2030 Agenda (Figure 4).

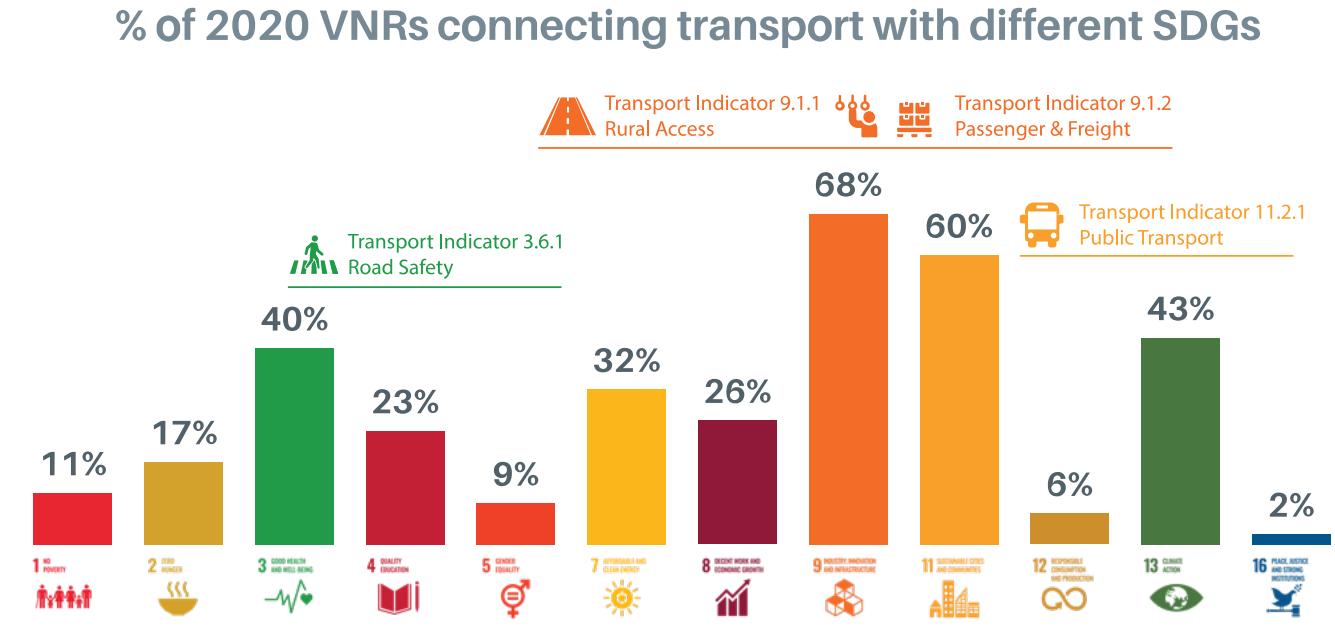


Figure 5: % of 2020 VNRs connecting transport with different SDGs

5 Out of the 47 submitted VNRs, 45 reports were made accessible on the official VNR database. Main messages of the VNRs of Barbados and St. Vincent and the Grenadines are available in the database.

As shown in the SLOCAT Wheel on Transport and SDGs (Figure 1), sustainable transport is related to various goals and a number of specific targets across all SDGs for which action on sustainable, low carbon transport and mobility has the strongest impact. Figure 5 shows how countries connected transport infrastructure and services to different SDGs in the 2020 VNRs.

Following a similar pattern from previous reporting years, the majority of references are focused on transport infrastructure development in the context of:

Passenger and freight activities (SDG 9)

All-season rural roads (SDG 9)

Public transport systems (SDG 11)

Significant attention was also given to:

Reducing traffic fatalities and injuries (SDG 3)

Curbing mobile-source GHG emissions (SDG 13)

Increasing share of renewable energy and reducing final energy consumption in transport (SDG 7).

Among other SDGs, relatively more attention was given to the role of transport in:

Facilitating better access to jobs and economic opportunities (SDG 8)

Increasing school enrollment through subsidy schemes (SDG 4)

Connecting farmers to markets with shorter transportation time and costs (SDG 2)

It should be noted that **only a handful of countries reported pro-poor and gender-sensitive transport policies.** On the one hand, the poor, who typically live in or have been displaced to marginal or peripheral urban areas, have limited access to the only modes of transport affordable to them (walking, cycling and at best, where it exists and is affordable, public transport). The life of low-income urban/rural residents, living on the periphery, largely remains one of long wait and travel times, multiple transfers, long travel distances, and a significant percentage of income spent on declining and poor-quality transport options. On the other hand, sexual and gender-based violence is widely prevalent in public spaces related to transport, which could impose restrictions on the mobility of women and girls. Road safety is an issue, particularly for women and children along transport corridors going through rural areas without facilities for pedestrian mobility and protection. Also, women have less access to employment generated in the transport sector (in construction and maintenance, transport services and transport agencies) due to under-representation in engineering, cultural issues over women working outside the home and difficulties of organising childcare.

In 2020 VNRs, the linkages between transport and the SDGs oriented around infrastructure, energy and climate mitigation were clear. However, VNRs must pay further attention to the social dimension of sustainable development, thus establishing a stronger case as to how transport contributes to the overarching goals of the 2030 Agenda on poverty alleviation, social equity and 'Leaving No One Behind'.

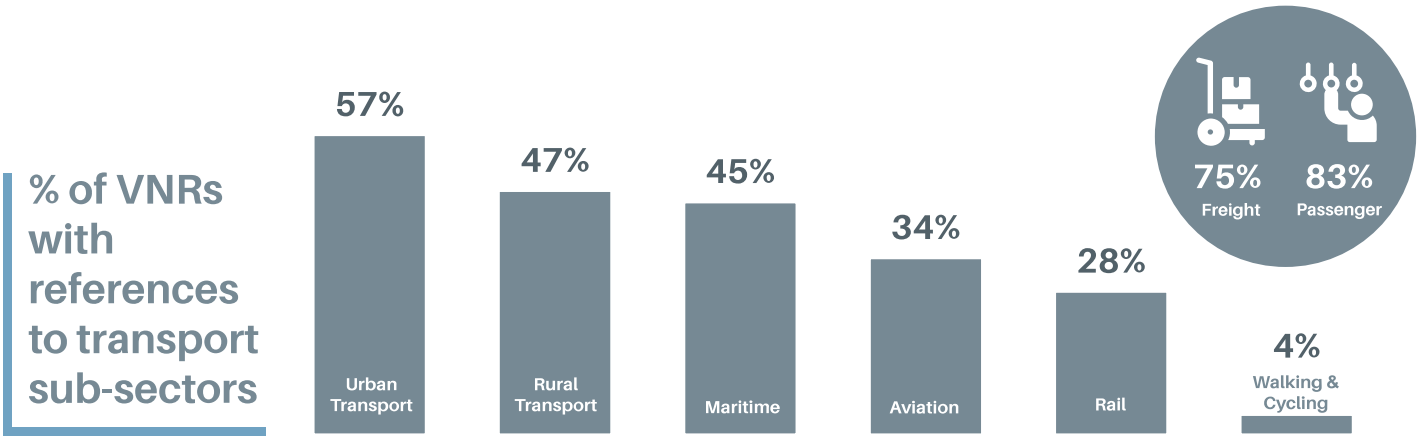


Figure 6: % of 2020 VNRs with references to transport sub-sectors

On the basis of transport-relevant indicators like 9.1.1 (rural access) and 11.2.1 (public transport), there was ample attention to urban and rural transport measures in the 2020 VNRs (Figure 6).

Among the high-volume transport modes (e.g., maritime, aviation and rail), many countries reported on maritime transport measures in the context of securing cross-border connectivity and increasing trade development.

Relatively fewer countries reported on rail-related measures, which shows a sub-optimal sign as rail is an imperative sustainable, low carbon solution for both passenger and freight activities.

Active mobility solutions were also largely overlooked in the 2020 VNRs. Globally, more than one-third of all trips are made on foot or by bicycle.[6] Walking and cycling are space-and cost-efficient modes that require minimal infrastructure and capital investment. They also offer a variety of positive sustainability impacts that include health and economic gains (e.g., improving property values, increasing revenues for businesses). Countries must not lose sight of how walking and cycling can strengthen social cohesion and improve the overall quality of life in cities.

Setting specific, ambitious and time-bound targets

Robust coordination and support from SDG-lead agencies is required to maximise the contribution of the transport sector within national development frameworks for short-, medium- and long-term planning. Establishing harmonised long-term strategies with ambitious visions and specific, time-bound targets greatly facilitates the implementation of sustainable transport measures to maximise impact.

In 2020, 17% of the VNRs reported specific transport targets (Figure 7). Among the 2020 VNRs, only a handful of countries have reported defined targets for transport actions with long-term vision for sustainability impacts. Establishing a common vision or strategy articulated around defined targets can significantly accelerate the uptake and integration of sustainability implications within the transport sector. The transport sector's long-term sustainable, low carbon vision must be aligned with the vision, targets and strategic planning of the government.

6 Cervero, R., (2013). Transport Infrastructure and the Environment: Sustainable Mobility and Urbanism. University of California. Available at: https://iurd.berkeley.edu/wp/2013-03.pdf

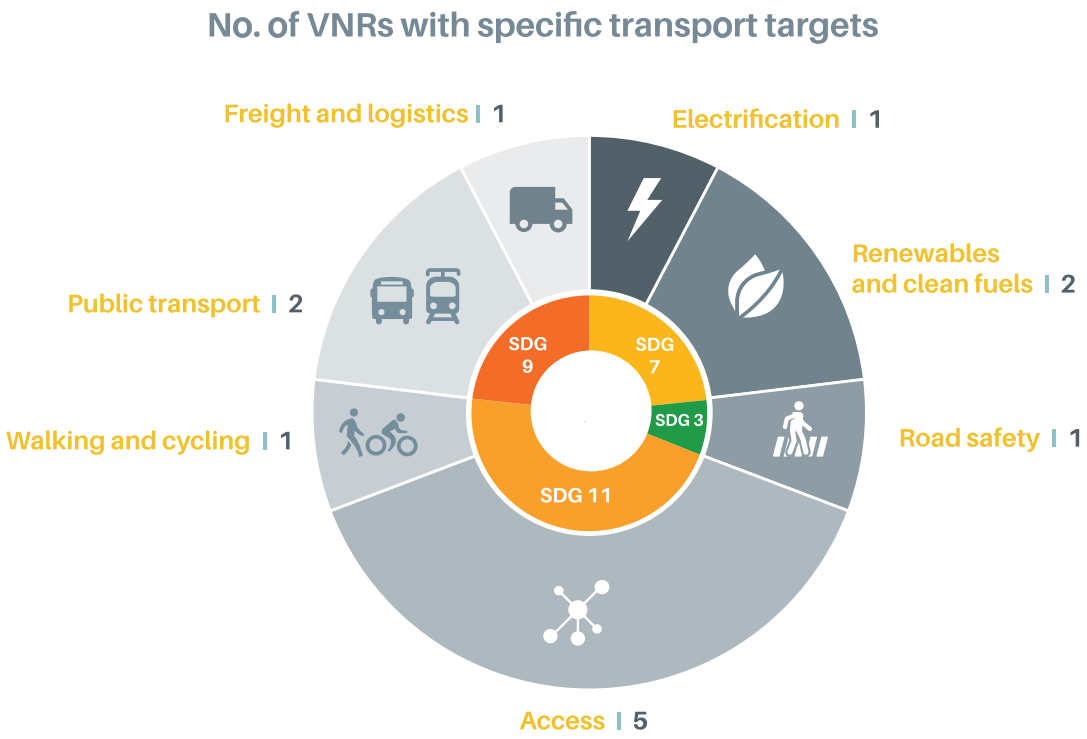


Figure 7: Number of 2020 VNRs with specific transport targets

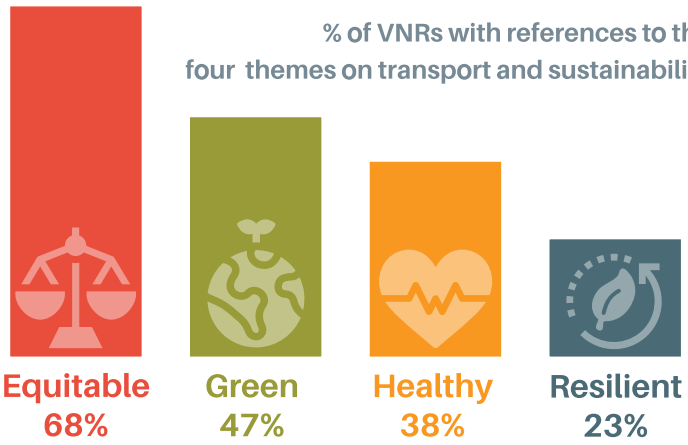
Table 1: Specific transport targets reported in 2020 VNRs

Argentina	• Increase universal access to public transport from 82% (2010) to 91% by 2030.
Estonia	• Increase the share of renewable energy in the transport sector to >10% by 2021. • Limit death rate from traffic accidents to under 1406 by 2030. • Increase the share of public transport, cycling, and walking >38.8% by 2030.
Finland	• Raising biofuel quota in road transport to 30% in 2030.
Kyrgyz Republic	• Increase regular passenger transport services in settled areas to 92% - 95%.
Nepal	• Increase road density from 0.63km per square km in 2019/20 to 1.5km per square km by 2030.
North Macedonia	• Increase share of paved road networks from 60% to 87.5% by 2035.
Russian Federation	• Increase the share of urban road networks from 42% (2017) to 85% by 2024. • Increase transport provision by 7.7% by 2024. • Increase universal access to transport to 70.7% by 2025.
Ukraine	• Reduce the share of the rural population living further than 3 km from paved roads to 0.5% by 2030. • Increase the volume of cleanly transported goods from 1,650.0 million tonnes (2020) to 1,900 million tonnes by 2030. • Increase the number of passengers on sustainable transport modes from 4.262 million (2019) to 6 million by 2030. • Increase the use of electric vehicles from 65% (2020) to 75% by 2030. • Reduce the number of rural households that lack access to urban areas from 24.4% (2019) to 10% in 2030.

Vision and target-setting should be informed by the following principles:[7]

- Define long-term vision and targets with multi-year sectoral development strategies and plans;
- Recognise the synergies and differences in timelines between SDGs and traditional transport sectoral development strategies;
- Illustrate how the targets contribute to local development priorities;
- Outline the details of the proposed activities, timings and responsibilities;
- Coordinate with SDG-lead agencies to maximise the contribution of the transport sector within the national development framework for short-, medium-and long-term planning.

Reporting on sustainability impacts



About half of the 2020 VNRs have explicit references to transport sustainability impacts. Figure 8 shows the percentage of VNRs that reported how transport is related to the four themes on transport and sustainability of the SLOCAT Wheel on Transport and the SDGs: Equitable, Green, Healthy and Resilient.

Figure 8: % of VNRs with references to the four themes on transport and sustainability of the SLOCAT Wheel on Transport and the SDGs

Selected examples of 2020 VNRs references to the four themes of the SLOCAT Wheel on Transport and the SDGs

Equitable

Armenia, Brunei Darussalam, Bulgaria, Costa Rica, Georgia, and **Nigeria** have provided reimbursement of transport costs or have increased transport services for teachers and children in rural settlements in order to improve their access to education.

Burundi imported buses adapted for persons with disabilities. **Riobamba, Ecuador** has launched the Buses Inclusivos Initiative to create a transport system centred on persons with disabilities. **Gambia** has held special consultation sessions with persons with disabilities to improve transport facilities and services. **India** has launched the Accessible India Campaign (or 'Sugamya Bharat Abhiyan') focusing on the accessibility of transport systems and the built environment. In the **Kyrgyz Republic**, public transport accessibility has reached 48.5% in 2018, with public transport accessibility higher in urban (66%) than rural (38%) areas.

Liberia has been improving its rural road networks to reduce transport costs and transform the living conditions of the poor and the vulnerable through better access to social services. **Morocco** launched a programme in 2015 including the construction of 22,000 km of rural roads to reduce territorial and social disparities in rural settlements. The Tayssir Financial Assistance Program was initiated to offer boarding and transport facilitation for children of refugees and immigrants.

7 Islamic Development Bank and SLOCAT Partnership. 2020. Transport, Climate Action and Sustainable Development: Synergies across NDCs and VNRs.

Micronesia supported the Okeanos Foundation to implement a pan-Pacific Vaka (boat) network to offer safe, regular and reliable service to remote communities. The Vakas are modernised and fossil fuel-free, certified for safe passenger transport and cargo (e.g., crops, provisions, educational supplies, medicine, tools, etc.) as well as disaster relief.

In **Port Moresby, Papua New Guinea**, a safe market programme with women-only buses ('Meri Saif') was implemented to protect women traders, who make up 80% of all traders. Major town markets have undergone transformational changes in infrastructure, leading to improved economic opportunities, improved sanitation, and a safe space for everyone.

Through cooperation with the Sopotniki Institute, **Slovenia** launched a safe mobility service for older persons to improve their social inclusion and strengthen the solidarity among people and generations.

Green

Austria has adopted a Mobility Master Plan 2030 to further expand public transport and implement flexible, demand-oriented mobility solutions to improve first/ last-mile connectivity. Affordable annual public transport and rail passes were introduced. The Plan also focuses on traffic avoidance, modal shift and the expansion of electric mobility and the use of alternative energy sources in transport, such as hydrogen and synthetic fuels. **Burgas, Bulgaria** has developed a sustainable mobility system with bikeshare, integrated intelligent systems for public transport and intelligent video surveillance in stations. In 2018, a pilot project with 30 smart parking spaces to collect road safety and congestion data was launched. **Quito, Ecuador** has developed a compact, efficient and sustainable urban system around the axes of the metropolitan transportation system. The government has provided financial incentives for land developers to build in areas with public transport (bus rapid transit and metro). To improve traffic management and reduce congestion, **North Macedonia** has launched a project to install an Intelligent Transport System (ITS) along its main corridors to collect real-time traffic data. Tallinna Linnatranspordi AS, a company owned by **Tallinn**, **Estonia**, has released the Cleaner Urban Environment Strategy for 2035, which includes a target to boost the number of transport passengers and procure clean public transport vehicles (bus, trolley and tram). It aims to have all public transport vehicles powered by renewable electricity by 2035. **Zambia** has launched the Lusaka Traffic Decongestion Project which would improve its arterial roads and construct dedicated bus lanes for bus rapid transit in the capital city.

Finland has launched a Sustainable Traffic Fuel Reform by promoting the use of electricity and biogas in public transport and motorised vehicles. **Peru** has been transforming its transport system by promoting electric mobility, increasing the use of renewable energy and expanding the use of bicycles through better district planning and interconnected cycle pathways. In **Seychelles**, three main road projects have been designed and implemented which have significantly reduced waiting time in peak hours in traffic from 90 minutes to 20 minutes. The projects will be further complemented by multi-storey parking projects to reduce traffic flow to only 10 minutes.

Slovenia launched the Climate Path 2050 project which enables municipalities to compare their performances in preventing climate change. The project adopts a vertical collaboration approach, supported by exchange on good practices in key sectors including transport, buildings and agriculture. Slovenia is also running the LIFE IP Care4Climate project, a multistakeholder partnership focusing on reducing GHG emissions in sectors with the highest potentials (including transport). **Uganda** has adopted the Green Growth Development Strategy for 2030, which outlines the role of transport and other sectors in the transition towards a green economy.

Healthy

Austria has developed an Automated Mobility Action Package (2019–2022), which includes 34 measures for road safety, GHG reduction and air pollution improvement. **Bangladesh** has adopted the National Road Safety Action Plan and passed the Road Transport Act 2018 to introduce tougher punishments for traffic rule violations.The establishment of a digital motor vehicle management system (retro-reflective number plate, radio frequency identification tag, digital registration certificate and digital smart card driving license) has contributed to a reduced death rate from road traffic injuries from 2.48 per 100,000 population in 2015 to 1.65 in 2018. **Ecuador** has launched the 'Volante Seguro' road safety programme to promote a culture of responsible driving among the contractors for the transportation of raw materials, fuel and cement. The programme includes continuous driver training, periodic verification of maintenance and improvement in vehicle conditions. The **Kyrgyz Republic** implemented the Safe City project and installed hardware and software systems for monitoring road use at certain intersections. Within the first nine months of operations, the number of accidents was reduced by 41.9% in Bishkek and the number of injuries from road accidents wase reduced by 39.1%. In the Chui region, the number of accidents fell by more than nine times and the number of road accident injuries was reduced by 56.8%.

Russia has launched a programme to expand its transport system along the Northern Sea Route to improve access to food for the population living in remote regions. Also, the proportion of population without direct access to medical services was reduced from 4.9% in 2014 to 3.4% in 2018.

Resilient

Argentina, Bulgaria, India, Kenya, and **Ukraine** indicated that the transport sector is a key area of implementation of their climate adaptation strategies and plans.

Malawi and **Papua New Guinea** have focused on the provision and maintenance of road networks that are year-round accessible to the rural population and climate-resilient r . The **Solomon Islands** aimed to develop a network of disaster- and climate-proof roads to cover up to 77% of its population. **Gambia**'s National Development Plan includes a programme which aims at expanding its primary road network in good condition (paved) and at constructing new bridges to increase all-weather accessibility across the Gambia River.

Papua New Guinea introduced transport infrastructure and incentives to connect local farmers to global market supply chains. It also adopted a US $1.24 billion stimulus package for COVID-19 recovery, which offered shipping subsidies for farmers in the Momase and Highlands region to secure food production and market access.

Applying the *Avoid-Shift-Improve* Framework with integrated, inter-modal and balanced approaches

The *Avoid-Shift-Improve* Framework entails three main avenues to promote sustainable, low carbon transport and mobility solutions (Figure 9). **Applying the hierarchy of *Avoid-Shift-Improve* strategies with integrated, inter-modal and balanced approaches is central to unleashing the full benefits of sustainable, low carbon transport, in terms of emissions reduction and equitable access to mobility.** *Avoiding* unnecessary trips with placemaking policies based on proximity and accessibility, as well as avoiding motorised trips should be our first step. *Shifting* to less carbon intensive modes, from private vehicles to public transport, shared mobility, walking and cycling, water-based freight, electrified road-rail freight, cargo bikes for last mile deliveries, etc., is an imperative for transport decarbonisation. *Improving* vehicle design, energy efficiency and clean energy sources for different types of freight and passenger vehicles is key to maximising this era of electrification.

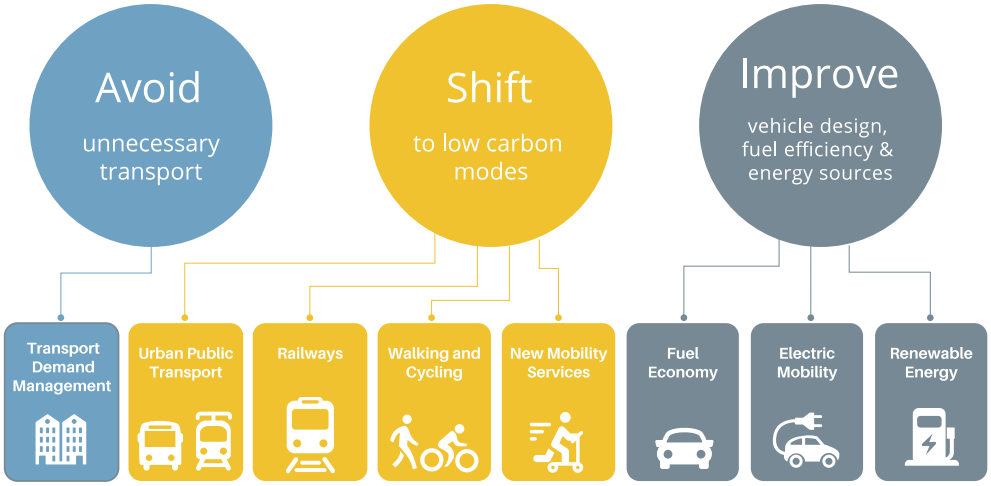


Figure 9: *Avoid-Shift-Improve* framework

In 2020, more than half of the VNRs cited policy measures related to the expansion and improvement of public transport (SDG Target 11.2) as well as road infrastructure development (SDG 9.1). Relatively more attention was given to measures to promote electric mobility (mostly for private vehicles), metro systems, and the use of renewable energy in transport (Figure 10).

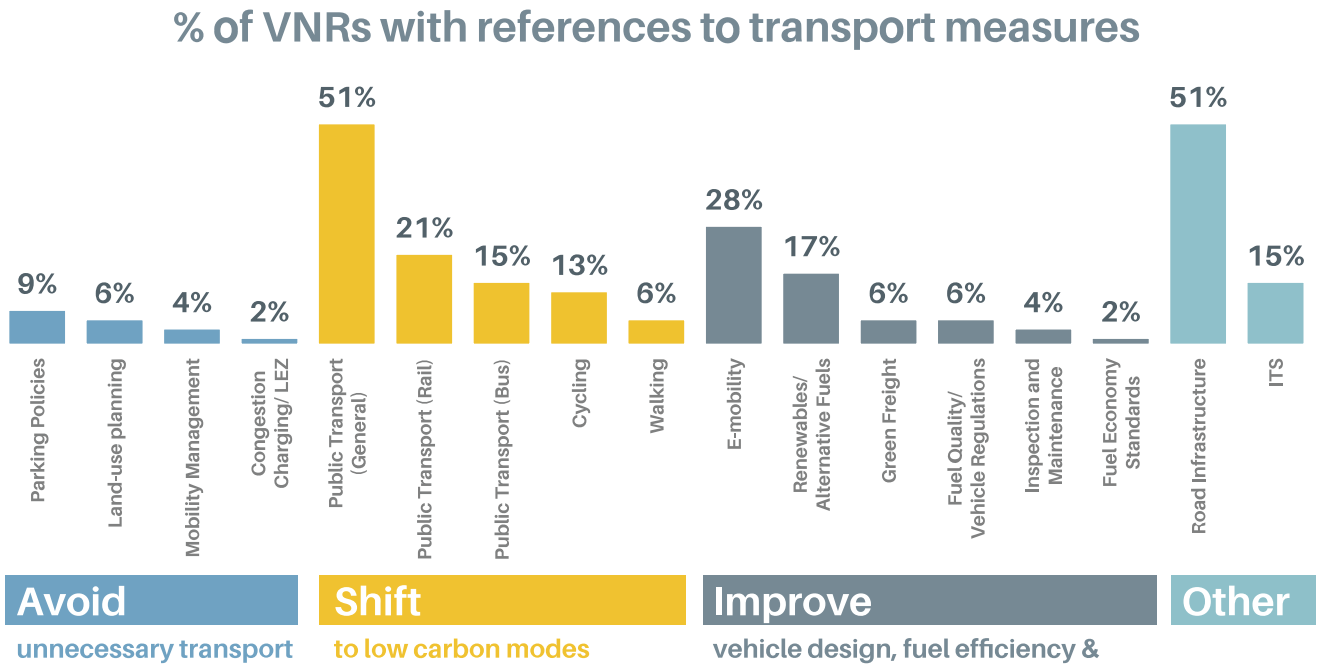


Figure 10: % of VNRs with references to transport measures

In general, very few VNRs reported on *avoid* measures, which shows that there is inadequate attention to the necessary long-term structural changes in business models, supply chains, city planning and behaviour patterns that could be brought about by *Avoid* transport measures. More efforts must be made to promote the implementation and reporting of *Avoid* measures. *Shift* and *Improve* measures - and the overall decarbonisation of the transport sector - are most effective when combined with *Avoid* measures. *Avoid* measures allow cities to limit vehicle traffic to the roadway capacity, and reward travellers who use resource-, space- and energy-efficient modes. *Avoid* measures require a human-centred transport planning approach and aim to actively influence the behaviour of citizens by using management measures such as congestion charging, or implementation of transport sector-wide carbon pricing; thus achieving true transformative changes in mobility.

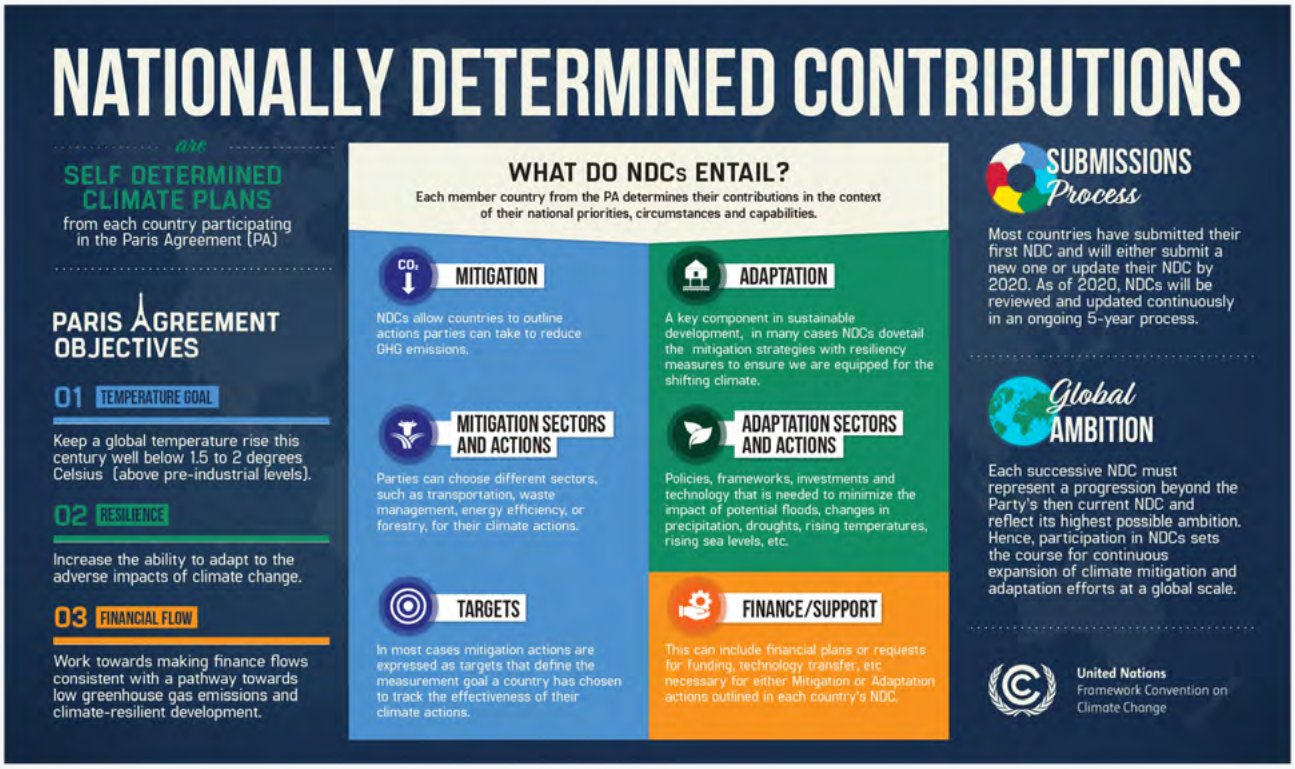
Policy recommendations and guidance

Aligning climate and sustainable development actions in the transport sector

The 2030 Agenda for Sustainable Development, together with the Paris Agreement on Climate Change provide a useful framework to help scale up sustainable, low carbon transport development. However, despite the ample common ground among these two global agendas, there is currently no common methodological framework applied across transport matters to integrate their synergies in development, implementation and reporting across diverse global and regional processes.

Paris Agreement and the NDCs

The 2015 Paris Agreement on Climate Change establishes the ambition of keeping global temperature increase to 'well below 2 degrees' Celsius above pre-industrial levels to avoid the worst consequences of climate change. In support of the Paris Agreement, NDCs are mitigation- and adaptation-related commitments submitted by countries to the United Nations Framework Convention on Climate Change (UNFCCC).



Source: UNFCCC NDC Synthesis Report (2020)

- SLOCAT is collaborating with the Islamic Development Bank (IsDB) to leverage synergies in NDCs and VNRs with the aim of scaling up sustainable transport measures. The research shows that not only are the two agendas advanceding in separate tracks, but also the transport sector is also poorly represented with limited alignment and synergies ensured in both processes.
- A study by the International Climate Initiative (IKI) based on the SCAN-tool shows that transport not only has the second highest number of positive linkages after the industry sector, but also the second highest number of negative linkages after the power sector. In total, there are 102 linkages between mitigation action and SDGs for the transport sector; 84% of them are positive.
- NDCs diverge from the VNRs in a number of important aspects, including the specific features and scope of each mechanism, content and direction. The divergences between the processes include the following issues:

Approach: NDCs are a target-setting mechanism (i.e., ex ante approach) which prioritise political consensus over science-based targets, while VNRs are a reporting mechanism (i.e., ex post approach), marked by limited preparation time.

Coverage: There is a divergence of quantitative data covered in both around target setting (for NDCs) and progress reporting (for VNRs). NDCs report on quantified transport emission data with qualitative information on transport adaptation. VNRs report on few aspects of quantitative transport data if it is included at all.

Acceptance: NDCs are the product of a binding process accepted by more than 190 signatories, while VNRs are, by definition, a voluntary process.

Implementation: VNRs share experiences of countries in the success, challenges and lessons learned from the SDG implementation; but there is little availability of information on implementation of NDCs to date.

- Different stakeholders and decision mechanisms have been set up for the NDCs and SDGs at the national level, mirroring the split between the global processes under the United Nations Framework Convention on Climate Change (UNFCCC) and the HLPF.
- Advancing NDCs and SDGs would encounter challenges in immense data collection and analysis, transparency and monitoring that overlap to a large extent. Further alignment is required both in the governance of the processes themselves and in the coordination among the national and sub-national actors formulating and putting them into practice.

Joint IsDB-SLOCAT Report on Transport, Climate Action and Sustainable Development: Synergies across NDCs and VNRs

The report links mechanisms in the climate change and sustainable development frameworks with the objective to identify synergies for the development, implementation and reporting on sustainable transport for IsDB member countries. The report adapted a framework based on the Mainstreaming, Acceleration, Policy Support (MAPS) approach utilised by the UN Sustainable Development Group in 2015. The framework presents a step-by-step methodological approach to assist transport sector policymakers in:

- Translating SDGs in national sector plans, strategies and budgets;
- Designing policy interventions to target resources at root bottlenecks; and
- Providing coordinated and pooled policy support for sustainable transport development.

Figure 11: Eight elements for mainstreaming the 2030 Agenda and Paris Agreement objectives within the transport sector

The framework presents a comprehensive set of eight elements for mainstreaming the 2030 Agenda and Paris Agreement objectives within the transport sector (Figure 11). The framework could be applied across different modes such as urban and rural transport, across different sub-sectors such as road, rail, inland waterways, sea freight, and aviation in passenger and freight transport. The report is available here.

SLOCAT Quick Wins on Transport, Sustainable Development and Climate Change - Inspiration for reporting transport actions in VNRs

The 20 SLOCAT Quick Wins on Transport, Sustainable Development and Climate Change is a course of immediate, bold and ambitious action for shifting the transport paradigm towards an equitable 1.5°C Planet. The Transport Quick Wins were proposed through a wide consultation conducted by the SLOCAT Partnership with a broad set of transport experts and other stakeholders, and have been evaluated through multifaceted impact analysis. They are:

- Tested at scale and are replicable with the possibility for large-scale impact;
- Technically and economically feasible in both developed and developing countries using available technologies;
- Available for both passenger and freight transport, with a reasonable balance between the two, and relevant to the Avoid-Shift-Improve Framework.

These actions have the potential to contribute toward reducing GHG emissions, thereby moderating climate impacts, while at the same time providing key sustainability benefits. Stakeholders should take into consideration the Transport Quick Wins in the strategic planning, implementation, evaluation and review process of the SDGs.

20 Quick Wins on Transport, Sustainable Development and Climate Change

References and further information on each Quick Win's characterisation, status of deployment and estimated impacts can be found here.

Expand car and (e-)bike sharing systems in primary and secondary cities.

Car and (e-)bike sharing offer considerable environmental and social benefits, such as carbon emission reductions and greater use of low carbon modes such as public transit, walking, and cycling; they reduce parking investments due to reduced ownership and use of private vehicles.

Expand city transport official training programs to build local capacity for sustainable transport in primary and secondary cities.

Increased training, mentoring, and partnering programs for national and international city transport officials in the field of urban mobility can allow the community of mobility decision makers and practitioners to more comprehensively incorporate current knowledge, trends and developments.

Expand sustainable freight recognition schemes to reward proactive carriers and shippers.

Sustainable freight recognition programs can help to reinforce and disseminate best practices in urban freight, green logistics, co-modality and electric freight. Potential areas of evaluation include vehicle operational efficiency and improvements in sustainable distribution to reduce CO2 emissions, congestion, collisions and operation costs. Green freight performance benchmarking through key performance indicators can also assist cities to compare logistics performance and identify solutions and suitable implementation opportunities.

Expand the use of Information and Communications Technology (ICT) applications for real-time travel information and route planning for walking, cycling, public transport and car-sharing.

Real-time multimodal transit information and route-planning applications provide travellers with up-to-date information on transit options, stop locations, and scheduled and predicted arrival times. For example, an algorithm which calculates the best transfer points for a user to park her car and continue a trip by public transport can result in mode shift over time.

Formulate Sustainable Urban Mobility Plans in primary and secondary cities.

Sustainable Urban Mobility Plans (SUMPs) can help cities and countries to design more livable and prosperous cities for all, as well as reduce congestion, road fatalities, noise and air pollution and CO2 emissions. SUMPs assist in developing long-term urban green freight policies to guide regulatory development and infrastructure investments and can require all major traffic generators to develop and implement site-based mobility plans to manage their accessibility.

Increase quality, availability, reliability, frequency, and efficiency of bus-based transit.

Bus Rapid Transit (BRT) and other high-quality bus-based transit systems can deliver fast, comfortable and cost-effective services through a combination of dedicated lanes; off-board fare collection and expanded use of smart cards; and fast and frequent operations. Because high-quality bus systems include features similar to light rail and metro systems, they are more convenient and reliable than regular bus services and are able to avoid causes of delay that typically slow regular bus services, such as being stuck in traffic and queuing to pay on board.

Implement (ultra-) low emission zones, including car-free zones in city centres.

Low emission zones (LEZs) are a regulatory measure in which access is restricted in a defined area for polluting vehicles (e.g., vehicles with higher emissions cannot enter the area or have to pay higher charges for access). The main drivers for LEZs are to reduce air pollution and stimulate the growth of low emission vehicles.

Implement zero-emission (last-mile) urban freight through electric mobility and cycling solutions.

Last-mile freight delivery has a high potential to incorporate electric or non-motorised transport to reduce impacts in the final leg of freight pathways. Technological solutions can be combined with freight demand management, which can encompass strategies such as staggering deliveries across time of day, mandating off-hour deliveries and consolidating deliveries. Successful last-mile freight demonstration projects could be scaled up further and could be implemented even more quickly with private sector support.

Improve freight efficiency through route optimisation, asset sharing between companies, and increased use of ICT solutions.

Truck transport accounts for about 25% of global transport energy use. Every year, trucks in the US travel empty for 50 billion miles (28% of their total mileage) and a quarter of containers on the road are empty in Europe. Empty runs have high economic costs due to the wastage of fuel, time, labour, and traffic congestion involved. The UK transport industry could save over 40 million miles of empty journeys by making use of spare vehicle capacity.

Introduce and scale up pricing for car-related travel options (e.g., congestion/road charging, parking pricing) in primary and secondary cities.

Congestion charging refers to variable road tolls that are intended to reduce peak-period traffic volumes to optimal levels. Tolls can vary based on a fixed schedule or they can be dynamic, changing depending on real-time levels of congestion. Tolls may also provide exemptions for zero-emission vehicles to help drive electric mobility as a key mitigation strategy. Congestion charging can be implemented to raise revenue or as a demand management strategy to avoid the need to add roadway capacity.

Introduce car-free days and ciclovías (temporary street closures to encourage cycling and walking) in primary and secondary cities to build support for longer-term policies.

Car-free days and ciclovías involve closing city streets to motorised traffic and opening them completely to pedestrians and cyclists. The purpose is to promote physical activity and encourage people to use alternatives to private motorised transport as a part of their daily routine. They are often voluntary and usually implemented across few streets for a limited duration; nevertheless, they can lead to longer-term transit behavioural change.

Introduce carbon pricing for the transport sector where (sub-) national carbon markets currently exist or are under development.

Carbon taxes tend to provide greater total benefits than many other energy conservation and emission reduction strategies, since they help to reduce congestion, road and parking costs, accidents, and sprawl. Implementation costs are minimal, since most jurisdictions already collect fuel taxes. It is estimated that each 10% fuel price increase reduces total automobile deaths by 2.3%.

Invest in rural road maintenance and modern supply chains to reduce global food loss and waste.

Curbing food waste will not only boost food security, but will also improve livelihoods, reduce GHG emissions and save land and water. Reliable transport is an essential factor in reducing food loss, which requires additional investments in rural road construction and maintenance, and the increased availability of rural transport services to provide regular all-season means for getting agricultural products safely to domestic and global markets.

Legislate and enforce stricter speeding regulations by operational and technical means to reduce emissions and road crashes.

Introducing lower speed limits on motorways and urban roads can lead to significant reductions in road accident deaths and reduce fuel consumption, noise pollution, CO2 and air pollutant emissions. The magnitude of reductions depends on a number of factors including vehicle fleet composition, technologies deployed, driving behaviour, frequency and magnitude of speeding, congestion, and traffic diversion due to reduced speed.

Modernise ageing rail fleets and traction systems to increase efficiency.

In today's context, it would be inappropriate to use trains older than 30 years old, but basic economics often prevents them from being replaced before the end of their natural life spans. These systems can be modernised by retrofitting newer technologies, especially newer traction power systems that are more powerful and more efficient; this transition can be accomplished quickly and at a relatively low cost.

Provide and improve walking and cycling infrastructure (e.g., connected walking paths, protected bike lanes), reallocating road space where necessary.

'Complete streets' are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. A more equitable allocation of road space will make it easier to cross the street, walk to shops and bicycle to work. Complete streets allow buses to run on time and make it safer for pedestrians to access train stations, while continuing to accommodate cyclists and motorists.

Ramp up charging infrastructure to encourage expansion of electric vehicle fleets in primary and secondary cities.

The global uptake of electric vehicles will depend on a number of factors, including advances in vehicle and battery technologies, reduced costs from economies of scale, enabling policy environments, and government incentives. The widespread availability of charging infrastructure is a necessary condition for a broad global rollout of electric vehicles, which will increase the attractiveness of electrification across market segments and will allow its integration into larger urban transport systems.

Tighten fuel economy standards for passenger vehicles.

Fuel economy efforts to date have focused on cars and trucks, but they have the potential to be extended across transport modes, including buses, trains, aviation and maritime fleets. Fuel economy improvements from conventional internal combustion engine cars can save US $2 trillion in unused fuel over the next decade (and up to US $8 trillion by 2050), freeing up valuable resources for other development priorities, such as education, health, infrastructure, or the promotion of other transport technologies and sustainable, low carbon modes.

Moving forward

A Decade of Action

- 2020 marked the completion of one-third of the ambitious journey of the 2030 Agenda. While we see progress being made in many geographies and sectors, UN Secretary-General António Guterres has emphasised that, 'Overall, action to meet the Goals is not yet advancing at the speed or scale required'.
- Guterres calls for all sectors of society to mobilise around a 'Decade of Action' on three levels.

Global action

Secure greater leadership, more resources and smarter solutions.

UN75: Global dialogue platform

Local action

Embed the needed transitions in policies, budgets, institutions and regulatory frameworks.

SDG Good Practices: Evidence-based stock-taking of progress

People action

Multi-stakeholder movement pushing for the required transformations.

SDG Acceleration Actions
Eval4Action: Awareness campaign

- Engagement around the campaigns and branding of the Decade of Action presents the transport sector with an opportunity to further show the importance of transport to the realisation of the 2030 Agenda.

Maximising transport dimension of upcoming HLPFs

- In 2020, UN Member States have agreed on the themes for the 2021, 2022, and 2023 HLPFs, specifying subsets of SDGs and areas of acceleration to be reviewed at each session (Resolution 74/298).
- UN General Assembly Resolution 74/298 calls for 2021 HLPF to 'consider progress in implementing the 2030 Agenda in its entirety and address the interlinkages between Goals, to promote integrated actions cutting across the three dimensions of sustainable development that can create co-benefits, address synergies and trade-offs and meet multiple objectives in a coherent manner, leaving no one behind'. Transport is playing a key role in promoting a sustainable, equitable and resilient recovery from the pandemic, and as such, should be reviewed during the 2021 HLPF under the theme, 'Human well-being and the SDGs: Recovering after the COVID-19 crisis'.

Photo credits: KiaraWorth IISD

- Transport should hold a central role in the follow-up and review of the 2030 Agenda for future HLPFs. Member States should also continue to strengthen transport ambition within VNRs, as doing so will help accelerate the achievement of a number of other goals simultaneously.
- More targeted advocacy efforts and in-depth analyses should be conducted to highlight the linkages between transport and these themes and SDGs under review, in order to maximise the transport dimension of upcoming HLPFs.

Action towards Climate-friendly Transport (ACT) initiative

The Action towards Climate-friendly Transport (ACT) initiative was launched at the 2019 UN Climate Action Summit and brought together hundreds of organisations from across the world working to bring about the transformation of transport. Since the Summit, the four components of ACT have each made progress towards their goals, thanks especially to their lead organisations and the efforts of GIZ and SLOCAT as coordinators.

Now, ACT continues its work as to rise to the challenge posed by the pandemic and further support enhanced sustainable mobility planning, the rollout of electric buses globally, the transformation of freight transport, and increased collaboration between the public and private sectors around transport decarbonisation.

The work of the ACT community can certainly be harnessed to support the realisation of the 2030 Agenda and SDGs. Engagement in the HLPF could help amplify ACT overall, as well as nourish the overarching political process, which currently lacks meaningful transport sector participation. ACT can be a platform that increases the sector's involvement in SDG implementation and review at all levels, and even helps scale up the visibility of transport in upcoming VNRs.

For those interested in ACT, opportunities include:

- Supporting the work of any of the four components of ACT under the coordination of component leads;
- Joining the wider ACT community;
- Supporting ACT's outreach and communications, as well as joining ACT activities around key moments in the international calendar.

Learn more at www.slocat.net/act-initiative

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Partnership on Sustainable, Low Carbon Transport

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www.slocat.net secretariat@slocatpartnership.org