Encouraging a regional approach to sustainable multimodal freight transport in Asia and the Pacific

Note by the secretariat

Summary

Enhancing the sustainability of freight transport is essential for delivering on the 2030 Agenda for Sustainable Development. In 2021, the members and associate members of the Economic and Social Commission for Asia and the Pacific adopted the Ministerial Declaration on Sustainable Transport Development in Asia and the Pacific, in which they encouraged a regional approach on sustainable multimodal freight transport.

Prepared in accordance with the Ministerial Declaration, the present document sets out 10 guiding principles on sustainable freight transport in Asia and the Pacific. In addition to supporting a harmonized regional approach in this area, the guiding principles are aimed at further deepening the linkages between policies and strategies on freight transport and the commitment to realizing the 2030 Agenda by consolidating priority actions on sustainable freight transport. The guiding principles also support ramping up funding, technical assistance and capacity-building on sustainable freight transport, including through partnerships and multi-stakeholder collaboration.

The Committee on Transport may wish to endorse the 10 guiding principles annexed to the present document as a means of further accelerating the shift towards sustainable freight transport in the region during the decade of action and delivery for sustainable development.

I. Introduction

1. Freight transport is a critical lever for achieving the Sustainable Development Goals, as it plays a central role in economic and social development. Few sectors permeate society as pervasively as freight transport, given that almost every product or resource used by people has been transported, often multiple times. As such, freight transport is closely connected to the realization of the Goals.
2. Prior to the coronavirus disease (COVID-19) pandemic, freight transport had been growing rapidly in line with broader trends of globalization and the diversification of global and regional value chains. While this growth has contributed to economic development, it has also created negative externalities that have increased so rapidly as to become a pressing concern. The ever-increasing volume of carbon emissions from freight vehicles, the congestion in cities, road accidents and air pollution have become matters of grave concern in most countries in the Asia-Pacific region and constrained progress in the implementation of many Sustainable Development Goals.

3. Although some progress has been made in achieving the Sustainable Development Goals in Asia and the Pacific, none of them are on track to be met by 2030.\(^1\) Progress on some Goals – for example, Goals 11, 12 and, most notably, 13, on climate action – has regressed. With freight transport being a major source of carbon emissions, it is essential to achieve sustainability in this area in order to reverse regression on Goal 13 and move forward on other Goals. With only eight years remaining in the decade of action to realize the Goals, and given the scale of the challenges, more needs to be done to accelerate progress.

4. Sustainable freight transport has been comprehensively defined by the United Nations Conference on Trade and Development as transport that aims to balance the social, economic and environmental dimensions of the sector in an integrated manner to ensure synergies, complementarities and coherence.\(^2\) Thus, the aim is for freight transport systems: (a) to be safe and accessible (social dimension); (b) to be efficient, reliable and resilient (economic dimension); and (c) to reduce greenhouse gas emissions, pollution and climate-related disruptions (environmental dimension). Enhancing the sustainability of freight transport, however, is fraught with challenges, including in the areas of policymaking and implementation, which leads to the adoption of silo approaches. Partnerships and multi-stakeholder collaborations are essential to addressing these challenges. Furthermore, the crisis caused by the COVID-19 pandemic should be transformed into an opportunity for accelerating the shift to sustainable freight transport in the region.

II. State of sustainable freight transport in Asia and the Pacific

5. Despite the extensive work that has already been carried out on different aspects of sustainable freight transport, much remains to be done given the magnitude of the challenges facing the region. Some of those challenges, grouped by their environmental, economic and social dimension, are set out below.

6. The environmental dimension of sustainable freight transport is the most pressing. Since 2010, the transport sector has recorded the highest intensity of growth in carbon emissions globally, with the fastest growth occurring in Asia and the Pacific. Freight transport-related emissions in the region have grown twice as fast as passenger transport-related emissions. Freight transport accounts for about 58 per cent of carbon emissions from the

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1. See https://data.unescap.org/.
transport sector in Asia and the Pacific and about 74 per cent of those emissions come from freight transported by road.\textsuperscript{3}

7. Rail and inland waterway transport account for a significantly lower share of freight transport-related carbon emissions, at 5 per cent and 7 per cent respectively (see figure I). Current business-as-usual projections for countries in the region estimate that freight transport-related carbon emissions could increase by 26 per cent between 2020 and 2030. Without significant policy changes, most freight will continue to be transported by emission-intensive trucks.

**Figure I**

*Freight transport-related carbon emissions, by mode of transport, 2020*

\[\text{Source: Asian Development Bank (ADB), Asian Transport Outlook Database. Available at https://data.adb.org/dataset/asian-transport-outlook-database (accessed on 1 September 2022).}\]

8. As freight transport-related emissions continue to grow at a faster rate than passenger transport-related emissions, more measures are needed to decarbonize freight. A recent collaborative effort between the International Transport Forum and the Economic and Social Commission for Asia and the Pacific (ESCAP) covering South-East Asia, South and South-West Asia and North and Central Asia indicates that, with a set of ambitious mitigation

policies known as reshape-plus, carbon emissions from non-urban freight transport could be halved by 2050 compared to 2015 levels.4

9. The potential actions for decarbonizing freight transport included in nationally determined contributions5 focus on shifting freight transport from road to rail or inland waterway and increasing fuel efficiency. However, more specific measures on passenger transport-related emissions are reported in nationally determined contributions than on freight-related emissions (see figure II).

Figure II
Nationally determined contributions and long-term mitigation measures, world and Asia and the Pacific

Source: Changing Transport, Tracker of Climate Strategies for Transport database.

10. The modal split of freight transport, i.e. the share of different modes of transport used to transport freight, varies significantly among countries and is primarily determined by geographical, economic and infrastructure factors. Overall, however, freight in the region tends to be transported by road instead of by more sustainable options such as rail or waterway. Estimates suggest that the share of freight transported by rail has actually decreased from 42 per cent in 2000 to 30 per cent in 2020, mainly due to inadequate intermodal infrastructure, inefficient operating standards and changes in demand.6 Since

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4 ESCAP, “Better regional connectivity will help Asia to decarbonize”, press release, 29 June 2022.
6 ADB, Asian Transport Outlook Database.
2000, the road infrastructure has expanded (in kilometres) at nearly double the rate of railway infrastructure expansion.

11. The demand for reliable, flexible, cost-effective, timely and viable door-to-door freight services means that road transport continues to be prioritized over rail and waterway transport. Currently, as only a few countries in the region have set targets to shift the freight transport modal split, the preference for road transport is likely to continue, unless strong measures are put in place (see figure III).

Figure III
Freight transport modal split in the region

Source: ADB, Asian Transport Outlook Database (see figure I).

12. With half of the population of the region living in cities, achieving sustainability in urban freight transport is critical for the overall sustainability of all freight transportation. Currently, urban freight transport accounts for nearly 15 per cent of the domestic freight activity, whereas it generates 30 to 50 per cent of domestic freight transport-related carbon emissions; this is because many products are delivered in low volumes and at high frequencies, in congested traffic conditions. Furthermore, urban freight transport is also a significant contributor to urban traffic congestion, which in turn results in a high economic penalty and heavy health impacts due to air pollution. Research indicates that, in 2015, six cities in ESCAP member States were among the

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10 cities with the highest number of transportation-attributable air pollution deaths (see figure IV).\(^8\)

Figure IV

**Urban freight transport-related emissions compared to intercity freight transport-related emissions, in 2015 and 2020**

![Graph showing carbon dioxide emissions](image)


13. The climate change challenge and related disruptions, in turn, create specific threats to the transport sector. The past few years have demonstrated that global and regional supply chains are exposed and vulnerable to natural hazards and prone to disruptions, increasing risks and costs for Governments and the private sector, both of which rely on safe, efficient and uninterrupted transport logistics flows. In its Sixth Assessment Report, released in 2021, the Intergovernmental Panel on Climate Change indicated that hot extreme weather conditions, heat waves and heavy rain had become intense and frequent globally over the previous seven decades. Such conditions have a direct impact on transport infrastructure.

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14. The broad spatial distribution of countries in the region makes the transport infrastructure and related supply chains highly susceptible to climate-related hazards and natural disasters. The global expected annual damages to road and rail assets range from $3.1 billion to $22 billion, and it is estimated that close to 60 per cent of those damages could affect countries in Asia and the Pacific. While the share of global expected annual damages in terms of gross domestic product (GDP) is insignificant at 0.02 per cent, it could reach about 0.5 per cent of GDP in some small island developing States. Expected annual damages are high for most countries in Asia and the Pacific (see figure V).

15. From an economic point of view, despite the progress made in achieving seamless transport connectivity in Asia and the Pacific, the region is still characterized by high transport costs and delays, which have a direct impact on competitiveness and integration into the global economy. The availability and quality of infrastructure across the region is highly uneven and characterized by missing links along road and rail networks, as well as at intermodal exchange stations and inland and maritime ports. The approach to facilitating international freight operations in the region is also fragmented: while numerous transport facilitation agreements have been signed, they continue to face implementation challenges. Eliminating non-physical barriers to international transport, operationalizing integrated intermodal transport systems at the national, subregional and regional levels that optimally combine
the strengths of various modes of transport and reduce transport logistics costs will support seamless regional transport operational connectivity.

16. Building the region’s transport infrastructure and achieving seamless regional operational transport connectivity remain long-term tasks for ESCAP members and associate members. The Regional Strategic Framework for the Facilitation of International Road Transport and the Regional Cooperation Framework for the Facilitation of International Railway Transport adopted by ESCAP provide common targets for the harmonization of legal instruments, cross-border documents and formalities; operational standards; and a range of facilitation measures. Road and rail remain dominant transport modes, both collectively and individually, for most ESCAP members and associate members. In many cases, however, the comparative advantages of each mode are not fully utilized to the benefit of national economies. Efficient road and rail transport with minimum friction at intermodal interfaces would promote the use of all modes of transport, each in accordance with its strengths, which would in turn strengthen the sustainability of freight transport operations.

17. Digitalizing international freight transport processes could further bolster transport connectivity at the national and regional levels and thereby enhance sustainability. Although countries in the region have been taking initiatives to introduce new technologies, scaling up digitalization in transport presents a formidable challenge due to the considerable disparity among countries in the region regarding digital infrastructure, research and innovation and digital skills. Moreover, regional cooperation is not being fully leveraged. Some of the initiatives that have been taken are: the introduction of electric vehicles in many countries to reduce greenhouse gas emissions; the use of autonomous vehicles, which could reduce road crashes; the operationalization of digital logistics platforms to efficiently share information among various logistics stakeholders and reduce costs; and the use of electronic cargo tracking systems to facilitate transit transport.

18. Investments into the global transport infrastructure are estimated at between $1.4 trillion and $2.1 trillion each year. The transition to a sustainable, low carbon pathway for transport is possible if these flows are directed specifically at making transport sustainable. Achieving sustainable freight transport requires diverse sources of financing for implementing policies aimed at phasing out fuel subsidies, accounting for externalities in transport pricing and providing guarantees and other risk capital for sustainable freight transport projects. Also, public-private partnerships need to be further strengthened to attract private financing. The potential of thematic funds such as the ones established by multilateral development banks for climate change to promote sustainable freight transport also need to be fully explored.

19. The social aspects of freight transport operations are also becoming increasingly visible. For example, local markets continue to be inaccessible to people in rural areas. About 30 per cent of the global rural population still does not have all-season access to a road network. In Asia and the Pacific, that figure is 25 per cent, which means that some 560 million people or half of the global rural population live more than 2 km from a road that is accessible in all seasons (see figure VI). With such poor access, rural farmers and producers are locked out of more lucrative markets that serve national, regional and global supply chains. Poor access and weak transport connectivity exacerbate logistics costs, thereby undermining the ability of rural communities to participate effectively in regional global supply chains and transport networks.
20. Moreover, the links between rural markets and regional transport networks such as the Asian Highway network, the Trans-Asian Railway network and the dry ports network have not been fully explored. Increased investment in rural transport infrastructure and services is needed.

Figure VI
Rural population without all-season access to roads, by region


21. The freight transport sector could also be enhanced by increasing women’s participation, which would have a positive impact on the implementation of Sustainable Development Goal 5, on achieving gender equality and empowering all women and girls, in particular its target 5.1, on ending discrimination against all women and girls everywhere, and target 5.5, on ensuring women’s full and effective participation and opportunities for leadership at all levels of decision-making.

22. The freight and logistics sector in Asia and the Pacific is traditionally a male-dominated sector. In 2020, under 10 per cent of employees in the transport sector were women. In comparison, the share of women in all sectors was 39 per cent, indicating that significant gender barriers exist in the transport and logistics sector. As in all industries, regional averages do not tell the whole story: there is considerable variation in the size of the gender gap among countries.

23. Globally, the share of women’s participation in the transport sector in 2020 was around 14 per cent. Although lower than the global average, the share of women’s participation in transport has been increasing in Asia and the Pacific, from roughly 6.5 per cent in 1990 to 10 per cent in 2020. That growth has slowed down, perhaps in part due to the lack of proactive policies promoting gender equality. This growth now needs to be accelerated by developing proactive policies to increase women’s participation in freight

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9 ADB, Asian Transport Outlook Database.
transport, enhance the sustainability of freight transport and support the realization of the Sustainable Development Goal on gender equality.

24. The potential role of industry associations, chambers of commerce and civil society organizations in supporting women’s participation in the freight transport sector has not been fully explored either. Throughout Asia and the Pacific, as well as globally, there are many good practices that could be scaled up and replicated to further encourage women’s participation.

25. Finally, the economic, environmental and social dimensions of freight transport have become increasingly entwined and therefore the institutional structures to support such transport in many countries in the region need to be revisited to ensure that all stakeholders (whether they are involved in infrastructure, operations or regulations) enhance and advance the sustainability of the sector. Many countries in the region have tried to address the negative externalities of the freight transport sector by creating special institutional structures for pollution control, climate change mitigation and road safety, for example. This has often created multiple layers of policymaking and institutional mandates that have actually limited the impact of the measures on the sustainability of freight transport. By creating specific governing mechanisms or structures for sustainable freight transport, it would be possible to carry out planning, legislative, regulatory, financing, operational, monitoring and promotional activities in a more effective manner.

III. Supporting the sustainability of the freight transport sector in Asia and the Pacific

26. To address the multipronged challenges to enhancing freight transport sustainability, a project entitled “Promoting a shift towards sustainable freight transport in the Asia-Pacific region”, under the twelfth tranche of the United Nations Development Account, was launched in 2019 with the overarching objective of increasing the sustainability of freight transport in the region by encouraging the design and implementation of freight transport policies in line with the aim of realizing the Sustainable Development Goals.

27. The project has two tracks. Under the first track, national assessments are undertaken in the target countries to develop strategies for increasing the sustainability of freight transport for consideration by the Governments concerned. National assessments were completed for Sri Lanka and Uzbekistan in 2021 and for Bangladesh in 2022; work is under way on the national assessments for Fiji and Myanmar.

28. For each of those countries, a background study highlighting the challenges to sustainable freight transport and a draft sustainable freight transport strategy 2030 has been prepared, followed by the organization of online national consultative workshops to solicit inputs and suggestions from stakeholders on the draft strategy. Draft strategies, as amended during the workshops, have been submitted to the ministries concerned in Bangladesh, Sri Lanka and Uzbekistan for further consideration.

29. Each draft strategy includes the following key elements: a vision, objectives, priorities, enablers, implementation arrangements and linkages to the Sustainable Development Goals, as well as specific actions.

30. Under the second track of the project, efforts will be made to encourage regional cooperation on key issues in sustainable freight transport by evolving consensus. Those issues could then be submitted for consideration in the
framework of the Intergovernmental Agreements on the Asian Highway Network, the Trans-Asian Railway Network and Dry Ports.

31. At its sixth session, the Committee on Transport adopted its recommendation 1, by which it reaffirmed the vital role of regional transport cooperation and recommended that concrete collaborative initiatives on sustainable freight be taken up within the ESCAP regional mechanisms. Also under the second track, a regional approach on enhancing sustainable freight transport in Asia and the Pacific was presented at the ninth meeting of the Working Group on the Asian Highway, the seventh meeting of the Working Group on the Trans-Asian Railway Network and the fourth meeting of the Working Group on Dry Ports, all of which were held in Bangkok and online in 2021.

32. All of the above-mentioned Working Groups welcomed the regional approach and agreed that it would provide the required focus on sustainability issues in freight transport. They therefore suggested that, as the sustainability of freight transport involved all modes of transport, the regional approach should be discussed at the Fourth Ministerial Conference on Transport.

33. Accordingly, the regional approach was submitted for consideration at the Fourth Ministerial Conference. Underscoring the importance of sustainable freight transport, the ministers of transport and the representatives of ESCAP members and associate members who adopted the Ministerial Declaration on Sustainable Transport Development in Asia and the Pacific encouraged a regional approach on sustainable multimodal freight transport that provided coherence to the existing initiatives, created synergies through partnerships and ensured high-level political affirmation with regard to sustainable multimodal freight transport. Furthermore, they noted the ongoing national efforts of member States to enhance the sustainability of freight transport in the decade of action for the Sustainable Development Goals and considered that a regional approach to sustainable multimodal freight transport would provide the required focus and ensure that the benefits of sustainable multimodal freight transport were maximized and the negative externalities minimized.

34. In addition, under the project entitled “Promoting a shift towards sustainable freight transport in the Asia-Pacific region”, two major capacity-building initiatives have been undertaken on sustainable freight transport. To leverage the work of the International Transport Forum on freight transport modelling, and together under another United Nations Development Account project, on transport and trade connectivity in the age of pandemics, a joint capacity-building programme entitled “Sustainable transport connectivity and the COVID-19 pandemic: pathways for greater resilience and sustainability” was developed to support countries in incorporating into their medium- and long-term freight transport policies the lessons learned from the COVID-19 pandemic.

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10 See ESCAP/CTR/2020/6.
11 See ESCAP/AHWG/2021/INF/1.
12 See ESCAP/TARN/WG/2021/4.
13 See ESCAP/DP/WG/2021/INF/3.
14 ESCAP/TARN/2021/5, para. 21.
16 ESCAP/78/15/Add.1, para. 4.
17 Ibid., twenty-seventh preambular paragraph.
pandemic response and in implementing appropriate freight transport policies for greater resilience, inclusiveness and environmental sustainability.

35. In 2021, under that programme, the secretariat and the International Transport Forum held capacity-building workshops for three ESCAP subregions – South and South-West Asia, North and Central Asia and South-East Asia – and developed publications that are now available online. In the reports it is reiterated that all strategies for better transport connectivity must recognize, and build upon, regional and subregional specificities. In addition, the secretariat is currently working on subregional strategies on sustainable freight transport for consideration by the appropriate subregional forums.

36. The second capacity-building initiative that has been undertaken is on accelerating rail digital transformation together with the International Union of Railways. It consists of developing e-learning material and organizing online capacity-building workshops to enhance the understanding of those developing policies on rail in the region on ways to harness the potential benefits of rail digitalization to support the shift towards sustainable freight.

37. In addition, a regional study was undertaken and presented at the policy segment on regional cooperation on railway transport in the times of pandemic that was held back-to-back with the seventh meeting of the Working Group on the Trans-Asian Railway Network, held in May 2021.

IV. Guiding principles on enhancing sustainable freight transport in Asia and the Pacific

38. It is evident that the issue of enhancing freight sustainability is inherently challenging and therefore needs continual engagement by stakeholders. The central action in this regard would be to reinforce and implement the existing mandates on deepening freight sustainability. Therefore, considering the guidance received during various intergovernmental meetings on the matter, the lessons learned and the issues identified during national consultations on sustainable freight for pilot countries, 10 guiding principles for sustainable freight transport in Asia and the Pacific have been developed to consolidate priority actions on sustainable freight as related to the realization of the Sustainable Development Goals (see annex).

39. The 10 guiding principles are the following:

(a) To decarbonize freight transport;
(b) To optimize the modal split in freight transport operations;
(c) To build the resilience of freight transport infrastructure to climate change and other disruptions;
(d) To reduce freight transport logistics costs, including for cross-border and transit transport;
(e) To address urban freight transport challenges;
(f) To enhance the inclusiveness of the freight transport sector by promoting women’s participation;

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19 ESCAP, “Enhancing shift towards sustainable freight transport in Asia and the Pacific: opportunities through rail decarbonization” (Bangkok, 2021).
(g) To increase access for people in rural areas to wider transport networks;
(h) To strengthen governance structures and the capacity of freight transport stakeholders;
(i) To encourage innovative and diversified financing sources, including through private sector engagement;
(j) To promote the use of data, digitalization and transformative technologies.

40. The guiding principles are primarily addressed at those developing policies on freight transport in ESCAP member States and are aimed at:
(a) deepening the linkages between policies and strategies on freight transport and the realization of the 2030 Agenda for Sustainable Development by consolidating priority actions on sustainable freight transport; (b) ramping up funding, technical assistance and capacity-building on sustainable freight transport through partnerships and multi-stakeholder collaborations; and (c) fortifying the political affirmation for urgent measures to deepen freight sustainability in Asia and the Pacific in the decade of action and delivery for sustainable development.

41. Apart from supporting countries in realizing the Sustainable Development Goals, sustainable freight transport policies based on the guiding principles would also assist countries in implementing various aspects of other global frameworks and commitments, including the Paris Agreement, the Sendai Framework for Disaster Risk Reduction 2015–2030, the SIDS Accelerated Modalities of Action (SAMOA) Pathway, the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014–2024, the New Urban Agenda, the Aichi 2030 Declaration on Environmentally Sustainable Transport: Making Transport in Asia Sustainable (2021–2030) and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development.

42. The guiding principles would also support the implementation of regional mandates, including ESCAP resolution 78/3, by which ESCAP endorsed the Ministerial Declaration on Sustainable Transport Development in Asia and the Pacific and the Regional Action Programme for Sustainable Transport Development in Asia and the Pacific (2022–2026).

43. The guiding principles acknowledge the fundamental role of regional and/or subregional cooperation in enhancing the shift towards sustainable freight transport. Apart from providing a platform to forge agreements and frameworks, regional cooperation is also useful for sharing information and learning from the experiences of members and associate members, and for understanding which sustainable freight transport solutions have worked and where, and which are replicable and scalable. The guiding principles reaffirm the integrated and indivisible nature of the Sustainable Development Goals, which means that freight transport policies based on the guiding principles could lead to the realization of multiple Goals and targets.

44. The guiding principles would also support the design and implementation of sustainable freight transport strategies and policies that would turn the crisis unleashed by the COVID-19 pandemic into an opportunity to build back better. Freight transport systems that leverage digitalization and transformative transport technologies could accelerate the shift towards sustainable freight transport in the region.
45. A draft version of the guiding principles was presented and discussed at the Regional Meeting on Enhancing Shift towards Sustainable Freight Transport in the ESCAP region, held on 17 August 2022. Participants in the Regional Meeting agreed and recommended that the final version of the guiding principles should be presented to the Committee on Transport at its seventh session, to be held in Bangkok and online from 23 to 25 November 2022, for endorsement.

V. Issues for consideration by the Committee

46. The Committee may wish to provide the secretariat with guidance on its work on sustainable freight transport. Furthermore, it might wish to do the following:

   (a) Consider endorsing the 10 guiding principles on sustainable freight transport in Asia and the Pacific annexed to the present document as a means of further increasing the sustainability of freight transport in the region;

   (b) Invite members and associate members to share their experiences, including on good practices on sustainable freight transport, that have the potential for replicability and scalability;

   (c) Provide further guidance on enhancing the shift towards sustainable freight transport in Asia and the Pacific to support the implementation of the 2030 Agenda.
Annex

Guiding principles for sustainable freight transport in Asia and the Pacific

To enhance the sustainability of freight transport in Asia and the Pacific, it is recommended that the design and implementation of freight transport policies be based on the guiding principles set out below.

Guiding principle 1. To decarbonize freight transport

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 7, 9, 12 and 13, it is recommended that members and associate members of the Economic and Social Commission for Asia and the Pacific (ESCAP):

(a) Accelerate the decarbonization of freight transport through the adoption of dedicated strategies, in line with the Paris Agreement, and harness the positive spillovers of decarbonization to support the realization of multiple Goals;

(b) Consider establishing a suitable modality, such as a subregional or regional cooperation mechanism, framework or agreement, to accelerate the process of decarbonizing freight transport in the decade of action and delivery for sustainable development;

(c) Encourage private sector partnerships and initiatives to decarbonize freight transport.

Guiding principle 2. To optimize the modal split in freight transport operations

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 7, 9, 12 and 13, it is recommended that ESCAP members and associate members:

(a) Shift freight transport, where possible, to relatively more efficient or more environmentally friendly modes, such as rail and inland waterway transport;

(b) Frame proactive country-specific modal shift policies that foster investments in relevant intermodal infrastructure and create institutional frameworks to shift freight transport to more sustainable modes;

(c) Leverage regional and/or subregional cooperation, as appropriate, to promote the shift to more sustainable modes of transport, for example by operationalizing multimodal transport corridors.

Guiding principle 3. To build the resilience of freight transport infrastructure to climate change and other disruptions

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 9, 11 and 13, it is recommended that ESCAP members and associate members:

(a) Develop strategies, policies and implementation plans to build the resilience of freight transport infrastructure and operations to mitigate and adapt to climate change and other disruptions;
(b) Ramp up support for resilient freight transport in least developed countries, landlocked developing countries and small island developing States, as they suffer disproportionately from climate change impacts and other disruptions;

(c) Share experiences among countries and enhance the capacity of stakeholders to mainstream resilience in freight transport infrastructure and operations.

Guiding principle 4. To reduce freight transport logistics costs, including for cross-border and transit transport

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 1, 8 and 17, it is recommended that ESCAP members and associate members:

(a) Leverage the intergovernmental platforms provided by the Working Group on the Asian Highway, the Working Group on the Trans-Asian Railway Network and the Working Group on Dry Ports to continue to deepen regional infrastructure and operational connectivity;

(b) Enhance the efficiency of border crossings by addressing physical and non-physical barriers in international transport, including by encouraging coordination among border agencies, both within and across borders;

(c) Encourage the use of digital technologies to reduce freight transport logistics costs and facilitate transit transport.

Guiding principle 5. To address urban freight transport challenges

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 3, 11 and 17, it is recommended that ESCAP members and associate members:

(a) Develop sustainable urban freight transport plans and strategies, and/or modify existing plans and strategies, to reduce urban freight transport externalities, including freight transport-related accidents;

(b) Promote multi-stakeholder decision-making mechanisms that comprehensively address urban freight transport issues through a bottom-up approach that links development challenges to specific Sustainable Development Goals and their targets;

(c) Deepen regional cooperation by sharing experiences and lessons learned on sustainable urban freight transport practices that encourage synergies while being replicable and scalable.

Guiding principle 6. To enhance the inclusiveness of the freight transport sector by promoting women’s participation

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 5, 8 and 10, it is recommended that ESCAP members and associate members:

(a) Frame and implement proactive strategies and policies to widen women’s role in the freight transport sector across the region;

(b) Involve academia and the private sector in actively imparting the required knowledge and skills to women;
(c) Encourage the adoption of hybrid occupational models, such as working from home and other innovative solutions, to motivate women to increase their participation in the freight transport sector.

Guiding principle 7. To increase access for people in rural areas to wider transport networks

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 1, 9, 11 and 12, it is recommended that ESCAP members and associate members:

(a) Develop dedicated rural freight transport policies and projects based on deeper social cost-benefit analyses;

(b) Identify and build a chain of cold-storage and other kinds of warehouses in rural areas to reduce food loss in production and supply chains, including post-harvest losses, under public-private partnership schemes;

(c) Deepen regional and/or subregional cooperation, as appropriate, for enhancing rural markets’ access to wider transport networks.

Guiding principle 8. To strengthen governance structures and the capacity of freight transport stakeholders

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 13, 16 and 17, it is recommended that ESCAP members and associate members:

(a) Establish appropriate governance mechanisms on sustainable freight transport to formulate coherent policies that address the complexity of the involvement of multiple stakeholders in freight transport, horizontally across ministries and vertically at different levels of government, as well as in the private sector;

(b) Activate the above-mentioned governance mechanisms through concrete workplans, terms of reference and legislation, as appropriate;

(c) Enhance the capacity of government officials and private entities to mainstream sustainability in freight transport by instituting dedicated capacity-building programmes across the region.

Guiding principle 9. To encourage innovative and diversified financing sources, including through private sector engagement

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 10 and 17, it is recommended that ESCAP members and associate members:

(a) Promote private sector financing for sustainable freight transport through public-private partnerships by developing the appropriate regulatory structures to manage risks;

(b) Prepare bankable projects on sustainable freight transport and tap into financing from thematic funds such as the green climate fund and the climate change action plan, as well as other similar initiatives of multilateral development banks;

(c) Establish national, subregional and regional sustainable freight transport funds, as appropriate, to finance projects that have a high potential to increase sustainability and create synergies.
Guiding principle 10. To promote the use of data, digitalization and transformative technologies

Considering that the decarbonization of freight transport would directly support the realization of Sustainable Development Goals 9 and 17, it is recommended that ESCAP members and associate members:

(a) Increase the coverage, timeliness and quality of data and establish a harmonized data collection, management and sharing system related to sustainable freight transport to allow for better monitoring and reporting on freight transport-related Goals;

(b) Expand regional cooperation and establish a subregional and regional sustainable freight observatory to build a comprehensive repository of indicators, policies, good practices and innovative solutions, including on a circular economy;

(c) Develop the necessary legal and regulatory frameworks to support digitalization and transformative technologies in freight transport.