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Thematic session 5: **Policies for Sustainable Transport**

Concept note

I. Introduction

The development of a sustainable transport system will only happen with enabling policies-paired with innovations in other areas, such as institutions, sustainable transport planning, technologies, and multi-stakeholder participation in decision-making processes. A change in mindsets and mechanisms will be needed to shift individual and collective behaviour toward more sustainable mobility patterns and transport use. Governments can encourage more sustainable transport choices and discourage unsustainable options by adopting and enforcing legislation and regulations, adopting sustainable (freight and passenger) transport strategies, and providing incentives for pursuing sustainable transport pathways – this is particularly important where short-term decision-making dominates action as opposed to long-term planning. Likewise, the development of new technologies and the application of science for sustainable transport may require an incentive structure to ensure the availability of adequate human, financial, and institutional resources. Efforts must be made to engage and generate support from different groups of stakeholders through involving them in the decision-making process, especially when designing and implementing sustainable transport-related policies and plans, to ensure economic, social and political acceptability and sustainability. Recycling challenges related to a sustainability transition will have to urgently be addressed (e.g., used vehicle trade).

What constitutes an optimal policy pathway towards sustainable transport is not universal, but depends strongly on context, systemic vulnerabilities, historical pathways, cultural specificities, and institutional and regulatory structures. Yet, fragmented solutions can become a major obstacle towards the development of interoperable, harmonized systems that are essential for the development of sustainable transport systems and the achievement of sustainable mobility. While pathways may vary, the ultimate objective of sustainable transport remains unwavering and entails enhancing synergies and mitigating trade-offs between different economic, social, and environmental objectives. This session will explore the role and importance of different national, multilateral, and global policies and agreements in support of sustainable transport as well as related issues linked to planning, regulatory frameworks, and institutions; data; capacity-building; financing; and recycling challenges linked to the sustainability transition (e.g., used vehicle trade). It will aim to identify suitable solutions and highlight best practice examples.

II. Stocktaking

Transport infrastructure tends to be long-lived. Decisions taken today have long-term implications and are costly to reverse or retrofit in the future. For instance, airport expansion

projects are very large in scope and have a long-time horizon from planning to completion. Strategic plans, incentives, budgets, and regulatory structures must plan for the build-out of transport networks over time to accommodate growing populations and economic activities in ways that are efficient, socially inclusive, economically viable, environment-friendly and sustainable. Policies, regulations, and incentive structures are needed in most cases to tip the scale toward sustainable transport and long-term thinking.

Existing policies and regulations for sustainable transport at the domestic level are related to different areas, such as mode of transport, transport services, vehicles and vehicle use, and engineering and technology (e.g., technical standards). Vehicle regulations, for example, can improve the energy efficiency of vehicles and reduce emissions from road transport. Some examples include: road safety measures; mandating an increased supply by vehicle manufacturers of zero emission vehicles; regulating import of new and used vehicles, including limiting imports of fossil fuel motor vehicles beyond a maximum age; and establishing stricter fuel economy standards and CO₂ emission standards for new motor vehicles, as well as stricter fuel specifications (e.g. use of low-sulphur petroleum products); and end-of-life vehicles and user and producer responsibility (including recycling and reuse). The COVID-19 pandemic has triggered new national, multilateral, and global policies, including, among others, bailouts for affected industries and investments in low-carbon transport systems and active modes. Transport, one of the hardest hit sectors by the crisis, plays a crucial role in the overall recovery of economies worldwide, in particular of developing countries. Therefore, sustainable transport needs to be at the very core of national, regional and global strategies for recovery. COVID-19-related stimulus packages present an opportunity to invest in and incentivize green transport recovery. Irrespective of COVID-19, many governments have already put in place strategies and policies to promote sustainable transport through electric vehicles, micro-mobility infrastructure and services, resilient infrastructure, carbon reduction efforts, trade facilitation measures, and promotion of digitalization in transport supply chains. Some countries and private companies also made net-zero emissions commitments which pave the way for future opportunities for advancing sustainable transport.

When thinking about enhancing sustainable transport worldwide and building back better after the COVID-19 pandemic, one should also think of the possible negative environmental impacts this may have, particularly from a life-cycle perspective. An accelerated transition to sustainable transport will also increase the rate at which we leave behind no longer used vehicles and infrastructure, and would, potentially, raise challenges with the introduction of new environmental challenges. One critical tool in this regard is the lifecycle analysis (LCA) that examines emissions and other damages “from cradle to grave”. For example, there have been recent controversies over the sustainability of diesel vehicles which are more efficient leading to lower CO₂ emissions, but which emit higher levels of nitrogen oxide and other toxic gases.¹ Additionally, while analyses generally agree that electric vehicles (EVs) are more sustainable than conventional cars, the exact degree of emissions reduction may be lower than expected if the electricity is produced unsustainably or if the EV is imported from a distant location. In addition, due to strict environmental protection regulations, responsible disposal of used vehicles can be expensive in originating markets, making the export of used vehicles, including obsolete vehicles, to developing countries more attractive and lucrative - an issue that will have to urgently be addressed. Other challenges arise, for example, in the

¹ The Conversation. *Fact check: are diesel cars really more polluting than petrol cars?* Article. 2017. Available at: <https://theconversation.com/fact-check-are-diesel-cars-really-more-polluting-than-petrol-cars-76241>.

production of bio-based fuels or synthetic fuels where a lifecycle approach is necessary. Historically, few transport plans were based on lifecycle analyses due to lacking skills and expensive data, but thanks to new technologies, LCA has become a vital tool for planning and designing sustainable transport systems.² The International Civil Aviation Organization (ICAO), for example, as part of its Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), developed global policies and standards for sustainability criteria and lifecycle CO₂ emissions reduction.

Financing for sustainable transport comes from multilateral, public and private sources and can be directed towards a range of initiatives including for example expansion of infrastructure in under-served areas and retrofitting or installing complementary infrastructure and equipment (e.g., green electric charging networks) to accelerate net-zero transitions and build resilience. Accordingly, the specific financing instruments or sources can also vary. Transport funding comes from different sources, with private sources dominant in developed countries and public funding slightly larger in developing countries. The OECD estimates that USD 6.9 trillion a year of infrastructure investments are required up to 2030 to meet climate and development objectives.

Transitions toward sustainable transport will inevitably be data driven. It will be important to identify how data can best inform policy and planning while also ensuring more comprehensive collection, access, and coverage in line with privacy concerns. Much of these data also belong to the private sector, and thus establishing public private partnerships (PPPs) will be critical for maximizing public benefits, avoiding harmful decisions, and protecting data privacy. Leveraging these technologies for sustainable transitions in developing economies will require not only financing, but also capacity- building and technology transfer.

International agreements and regulations are vital for implementing public policy objectives and facilitating cross-border transactions through international harmonization of laws. Several UN agencies, such as ICAO, IMO, UNECE and UNCTAD, have been successfully supporting the development of international agreements and regulations geared towards sustainable transport.

III. Proposals for advancing progress in context of SDG acceleration and climate action

Governments need to introduce sustainable transport policies, legislation, and regulations. They may also invest in sustainable infrastructure directly, for example by building public transport systems, EV infrastructure or bike lanes, or by adapting existing infrastructure and systems (e.g., adapting airport infrastructure for the use of alternative renewable energy sources for aviation). Governments can also drive demand for sustainable transport through public procurement of sustainable transport options, such as electrifying public fleets. They can implement change across industries by mandating emissions regulations for vehicle manufacturers, removing fossil fuel subsidies, and encouraging the adoption of circular economy principles and cradle-to-cradle design in manufacturing to reduce the demand of raw materials and life-cycle emissions. And they can de-risk sustainable infrastructure investments by partnering with the private sector and absorbing part of the risk. De-risking is critical for unlocking private sector financing for sustainable transport.

² Haanstra, W. et al. (MDPI). *Design for Sustainable Public Transportation: LCA-Based Tooling for Guiding Early Design Priorities*. 2020. Available at: https://www.researchgate.net/publication/346226370_Design_for_Sustainable_Public_Transportation_LCA-Based_Tooling_for_Guiding_Early_Design_Priorities.

Governments must take a leading and coordinating role, but all stakeholders need to be on board for policies to be effective and for systems to be inclusive. By engaging different groups of stakeholders in the decision-making process, governments can break down silos and build momentum and support for the sustainable transition. For example, policies to remove fossil fuel subsidies are often blocked due to public opposition. In addition, the convergence of different sectors, such as the energy, transport, and digital sector, requires greater integration of planning and coordination. Governments can better navigate this political landscape by carefully assessing impacts of future measures and engaging in inclusive governance to innovate policies that meet today's needs without harming future generations or vulnerable populations. Offering reliable, affordable, and convenient sustainable mobility options through multi-modal transport systems, which include non-motorized or public transport options, can shift consumer behaviours.

Sustainable transport requires substantial investments in transport infrastructure, services, and equipment. Financial institutions need to have incentives and reduced risks to steer financing towards sustainable transport and related infrastructure. Well-researched strategic development plans for sustainable transport - in line with global, regional, and local sustainability goals - could pave the way for better access to finance if they reflect national transport objectives and are aligned with the 2030 Agenda and Paris Agreement. Such national plans and strategies can be presented as part of governments' Voluntary National Reviews at the High-level Political Forum on Sustainable Development. This has the potential to further strengthen policies and mobilize multi-stakeholder support for the SDGs.³ Governments can also direct stimulus funding towards green COVID-19 recovery by investing in sustainable mobility and attaching climate targets or greening requirements to government bailouts in the transport sector.

Public-private partnerships (PPPs) can ensure additional financing and private sector involvement while solving transport and logistics gaps provided, they are properly defined, structured, implemented and monitored. New PPPs in data and analytics, for example, can optimize the accessibility, efficiency, and safety of both passenger and freight transport systems. Data should be incorporated into the operations, planning, infrastructure design, development, and maintenance of these systems. Efficiency gains can also help minimize environmental externalities, for example, by increasing air transport operational efficiencies, minimizing empty cargo ships, and thus reducing emissions. Cities can deploy data technologies for real-time road navigation, public transit information, integrated multimodal information, digital payments, and intelligent traffic signals. To make an impact, transport authorities will need to ensure data literacy and establish safeguards for data privacy.

IV. Guiding questions

1. What type of policies, legislation, regulations and incentives can be used to encourage sustainable transport supply and demand and ensure that no one is left behind, including in the context of COVID-19 response and recovery? What are some best practice examples?
2. An accelerated transition to sustainable transport will also increase the rate at which we leave behind no longer used vehicles and infrastructure, and would, potentially,

³ Mobilizing Capital for SDG Country Plans: VNRs as SDG Investment Roadmaps, Action Platform on Financial Innovation for the SDGs, 8 July 2018.

introduce new environmental challenges -how can and should these be addressed from a lifecycle perspective (e.g., used vehicle trade)?

3. How can transport data help to support the transition to sustainable transport, including equitable access for all? What are ways to enhance data collection and bridge the digital divide so that the mobility needs of vulnerable groups and rural communities are adequately addressed?
4. What are ways to increase financing for sustainable transport? How can the private sector be more involved and what are regulatory, legal, and operational pre-requisites for successful PPPs?

Programme

Co-Chairs:

- H.E. Mr. Feng Zhenglin, Administrator of Civil Aviation Administration of China
- Mr. Liu Zhenmin, United Nations Under-Secretary-General for Economic and Social Affairs

Moderator:

- Mr. Young Tae Kim, Secretary-General, International Transport Forum

Panelists:

- Mr. Kris Peeters, Vice President, European Investment Bank
- Ms. Sophie Punte, Managing Director of Policy, We Mean Business
- Ms. Heather Thompson, Head, Institute of Transportation and Development Policy
- Mr. Stephen Cotton, General Secretary, International Transport Workers' Federation
- Mr. Fu Zhihuan, Academician of Chinese Academy of Engineering

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- Mr. Tareq Emtairah, Director, Energy Department, United Nations Industrial Development Organization

Other stakeholders:

- Mr. Alan McKinnon, Professor of Logistics, Kühne Logistics University, Hamburg
- Mr. Shi Baolin, President of China Academy of Transportation Sciences