Q1 What are some effective low carbon transport policies that countries in Asia and the Pacific need to start implementing in order to meet their climate targets?

- In principle, all countries around the globe can still do a lot more along the whole chain of the so-called ‘avoid-shift-improve’ transport measure framework. Where the biggest impact will lie will be dependent on the specific country context and the country’s main transport CO2 contributor.

- The ITF has carried out three regional transport outlook studies, in cooperation with ESCAP. One finding was that, for example, South-East Asian countries should focus a lot on maritime transport, while South Asia should increase their focus on road freight transport. All regions show a high reliance on aviation for the movement of people, while rail infrastructure could be further enhanced and electrified.

- Options for shipping and aviation, will largely lie in the uptake of zero-carbon or sustainable fuels. These will rely a lot on support for the build of adequate infrastructure to provide these fuels. Measures like carbon pricing can help accelerate the transition to low carbon fuels across all sectors. It can raise funds to support the building of the necessary infrastructure, while rectifying the price difference of these fuels in line with their environmental impact. They also allow to provide subsidies to those who may be adversely impacted by such schemes. Coupling a pricing scheme with zero-
emission design requirements for new build vehicles and low-carbon fuel standards will be most effective to ensure a fast transition to clean fuels in these sectors.

- In this context, countries should not forget the **wider benefits of promoting sustainable fuels**. Support for these fuels can benefit domestic industrial development and will diversify and decentralise fuel production. Many regions host bioenergy resources, and investments in power-to-liquid fuels offer opportunities to areas with high potential for renewable electricity generation. In addition, fuel production sites will move closer to feedstock resources, offering opportunities for local value creation and employment opportunities. Mobilising new countries to produce SAF can also increase energy supply resilience and reduce dependence on fuel imports for some countries.

- In all regions, however, **urban areas will still grow**, and with it, urban transport needs. Thankfully, there is a wide range of measures available to urban areas, to ensure transport emissions can be kept in check and are even reduced.

- First, in line with the concept of ‘**avoid**’ measures, growing cities have the huge opportunity to put appropriate **land use planning** measures in place. Such measures can encourage the development of compact and mixed-use areas that bring people closer to their desired destinations. This will help reduce transport needs. Such mixed-used developments can then also be viably served by public transport and encourage shifts to more sustainable modes, for example by active travel or public transport.

- The pandemic has also provided the opportunity to encourage teleworking and tackling transport emissions at the very source, for example by reducing passenger kilometres overall.
• Second, individual motorized mobility needs to **shift** to active modes, or to shared and efficient motorized modes, where required. These may be classic public transport modes.

• However, **transport innovations** can and should play a significant role. A transport system based on **on-demand shared mobility**, for example taxi buses, can aid in achieving decarbonisation goals while promoting improved equitable access, affordable transport, economic productivity, and the use of existing bus and rail networks.

• Effective measures to encourage such shifts can include congestion charging, low emission zones, (dynamic) parking pricing, the phase out of subsidized parking at the workplace. When/if implementing such measures, it must, however, be first ensured that adequate alternatives for travel exist that are accessible and affordable for all.

• ‘**Improve**’ measures comprise of instruments that improve the use of fuels, the efficiency of vehicles, and the performance of related infrastructure.

• The **direct electrification** of vehicles has been gaining ground as the alternative to fossil fuels in transport. Battery electric vehicles typically well outperform conventional and alternative vehicle technologies in terms of their CO2 emissions, even when sourced by non-renewable energy.

• By now, also many **viable business models**, including in the Global South, have emerged. They show that, by now, affordable access to electric vehicles is possible around the globe - whether used for public bus fleets or small individual 2-wheelers – and that the total
costs of ownership of such vehicles often outperform those of conventional vehicles.

- To ensure the uptake of clean vehicles, clean vehicle mandates should be put in place; charging infrastructure requirements should be developed, and environmental standards for 2nd vehicle imports need to be established in international agreements. Facilitating best practice exchange across borders will also help identify best finance options and business models for the uptake of electric vehicles across each country’s whole vehicle fleet.

- In this context, it is important not to forget that that smaller, lighter vehicles (whether electric or not) will always outperform their heavier, larger counterparts. People should always be encouraged to use the right, which is the smallest, size of vehicle at all times, and that their use should be shared whenever possible.

- To reap the full benefits of vehicle electrification, the greening of the electricity is of course a key factor.
Inclusive transport can create economic and social benefits and reduce poverty in the long term, by enabling equal access for all users regardless of health, age, income, and gender. How can governments and industry overcome the barrier physical infrastructure poses and create transport systems that offer equal access for all?

- Let me first reiterate the importance of creating inclusive transport systems.

- Inequalities in transport are detrimental to society. Lack of access to destinations and opportunities marginalises groups and leaves people unable to achieve their highest potential, individually and collectively. Transport systems can entrench social inequalities. Inequalities occur based on income groups, ethnicity, gender, age groups, and between urban and rural areas. Lack of access to education or employment affects the economy by stunting human capital and labour market participation.

- Furthermore, those who are “less travelled”, because they cannot afford to, are also the “travelled upon” - they bear the externalities of travel by the more fortunate. The case of aviation is striking: only 11% of the world’s population travelled by air in 2018, and only around 4% took longer distance international flights. More than half of total aviation-related emissions are the responsibility of an affluent minority of less than 1% of the global population.

- The externalities of such non-equal systems include communities impacted by infrastructure, noise and air pollution, higher rates of traffic incidents, high household transport expenditure due to forced private vehicle ownership, and other.
• Best policy measures for providing inclusive mobility vary by context, and can only be addressed with a collaborative and local approach. This requires 1) understanding why transportation systems have traditionally excluded certain groups, and 2) developing participatory planning frameworks that promote partnership with stakeholders that are typically underrepresented. Better participation can only be achieved if the means for participation are also accessible and stakeholders are given a voice in the design and decision-making processes.

• Policymakers also need to work across sectors to reduce these physical barriers and information and accessibility gaps, including with private sector partners. For example, micro mobility services can be an opportunity to increase the catchment area of public transport networks. Policymakers can work with such services by providing the regulatory framework to allow them to operate in public spaces. In places where informal modes are common, policymakers can work with these service providers to improve safety and emissions standards and integrate them with formal services to improve access.

• The funding of mobility should also reflect the needs of users: the vast majority of trips globally are local journeys, which can be completed on active modes. However, these trips are underrepresented in the investment in infrastructure. Sustained investment in active modes revitalises local communities and enables independent movement – for children to walk to schools, and for elderly people to pursue social activities.

• Regarding the use of technology specifically, policy makers need to ensure that its use provides solutions and fosters opportunities rather than create challenges and divide. This will start with raising awareness and developing an understanding of the challenges that
people may face. Working upfront with physically disabled, cognitive impaired, or other people who otherwise risk being excluded from digital services is essential.

- Also regulation needs to ensure physical and digital accessibility is taken into account in design processes. International standards can help ensure the right design of digitalised products and services, while education systems should include training for digital skills and savviness across all population groups.

- Above all, **people must be put first in** service design processes – whether digital or not. Time and time again, experience and evidence show that designing digital and other systems for those with the greatest needs helps not just them, but all.

- To be truly inclusive, accessible and equitable, the future of mobility must be shared, connected and people-centric.

- **Governments today have a unique opportunity** to increase transport equity and reduce transport emissions by putting these two goals at the heart of their economic recovery strategies.