Climate change is of major concern to the future livelihoods of the peoples of this planet. While transport plays a critical role in economic and social development, the transport sector, as one of the top consumers of fossil fuels, is a major contributor to air pollution and generates a variety of emissions that impact the climate. Transport systems are responsible for around 26 per cent of globally emitted greenhouse gases, mainly through the burning of fossil fuels, representing around 30 per cent of all fossil fuel use. It is estimated that investing in better end-use fuel and electricity efficiency in transport use can help cut emissions in the sector by nearly 30 percent by 2050 (IEA 2012).

Climate change has in turn impacts on critical transport infrastructure worldwide. Ports for instance, key nodes in global supply-chains, handling over 80% of the volume of world trade, are likely to be affected directly and indirectly by climatic changes, such as rising sea levels, extreme weather events and rising temperatures, with broader implications for international trade and for the development prospects of the most vulnerable nations, in particular LDCs and SIDS. Given the potential for climate related damage, disruption and delay to transport across closely interconnected global supply chains, enhancing the climate resilience of critical transport infrastructure is of strategic importance. Transport systems are under threat from the effects of climate change and extreme events that are expected to be more frequent and, or intense, in the future. It is therefore essential to reduce fossil fuel consumption and emissions from transport (mitigation) and to develop effective adaptation response measures that make transport systems and services more resilient to the impacts of climate variability and change (adaptation). Finding sustainable transport solutions, including enhanced measures to reduce emissions, adequate climate change mitigation and effective adaptation, will be central to meeting the ambitious goals outlined in the Paris Agreement. It will also be critical to achieving progress on several of the Sustainable Development Goals and targets, technology and innovation, inter-modal links and systems, and a robust commitment to public transport will all be vital components of a low carbon transport future.
This session will discuss both mitigation and adaptation strategies and measures at international, regional, national and urban levels. It will consider potential responses to the climate change challenge, such as through mainstreaming climate change considerations in national and city strategy and policy, improvements to planning processes and applications of new innovative technologies. It will also consider relevant capacity-building needs and financing. The panellists will also share their views on specific measures, such as alternate fuels, deployment of intelligent transport systems, improved urban public transport, and climate impact adaptive resilient transportation systems. The role of international conventions and standards relating to emissions from transport will also be discussed.

Possible questions for discussion:

1. What measures or actions have been taken nationally to reduce overall greenhouse gas emissions from the transport sector? How effective were the measures or actions? Whether specific goals or targets on tackling climate change have been included in national and urban transport development strategy and policy? What are challenges in formulating and implementing the strategy and policy? Natural disasters and climate events lead to damage to transport infrastructure. What are your new policy initiatives to safeguard and adapt transport systems? Which are the most important related capacity-building needs?

2. What are emerging innovations in the transport sector – to make the system more sustainable? How would you see the technology evolving in 20 years? Would we see more electric cars or more deployment of intelligent transport systems and more efficient public transportation systems? How do countries and cities need to develop their transportation systems while honouring their global commitments to the SDGs, the Paris Agreement and other climate related commitments? What are the most important data and information needs in the context of risk assessment and adaptation planning for critical transport infrastructure?

3. What needs to be done to reduce sectoral emissions? How effective are the conventions and standards made at national, regional and global levels in reduction of greenhouse gas emissions? What can be done to further help reduce emission at all levels? How can policy and regulatory measures best support effective climate change adaptation for transport infrastructure?