Chair's Summary

Eighth Regional Environmentally Sustainable Transport (EST) Forum in Asia

(*Integrated Conference of BAQ2014 & Intergovernmental Eighth Regional EST Forum in Asia ~ Next Generation Solutions for Clean Air and Sustainable Transport − Towards a Livable Society in Asia*)

Bandaranaike Memorial International Conference Hall (BMICH)
19-21 November 2014, Colombo, Sri Lanka

I. Introduction

1. With the overarching theme of "Next Generation Solutions for Clean Air and Sustainable Transport − Towards a Livable Society in Asia", the Ministry of Environment and Renewable Energy (MERE) of the Government of Sri Lanka, the Ministry of Transport (MOT) of the Government of Sri Lanka, the Ministry of the Environment of the Government of Japan (MoE-J), the United Nations Centre for Regional Development (UNCRD), and the Clean Air Asia (CAA) co-organized the "Integrated Conference of Better Air Quality (BAQ) 2014 and the Intergovernmental Eighth Regional EST Forum in Asia" from 19 to 21 November 2014 in Colombo, Sri Lanka. The conference was hosted under the patronage of H.E. Mahinda Rajapaksa, President of the Democratic Socialist Republic of Sri Lanka.

2. Recognizing that clean air and sustainable transport are essential to a livable society in Asia, the Integrated Conference called for innovative, smart and cost-effective solutions (policy, institution, technology, and financing) that significantly reduce air pollution and greenhouse gases from energy, industry, transport, and area sources, and ensure a safe, equitable, environment and people-friendly transport system by accelerating the shift towards more environmentally sustainable transport (EST) in Asian cities and countries. The Integrated Conference was not only a follow-up to the Rio+20 Outcome Document – *The Future We Want*, but also aimed to enrich the regional input to on-going discussions and consultations around post-2015 sustainable development agenda and sustainable development goals (SDGs).

3. The Integrated Conference was supported by various international organizations, scientific and research institutions, NGOs and donor agencies, such as the Asian Development Bank (ADB), EMBARQ (The World Resources Institute's Center for Sustainable Transport), German International Cooperation (GIZ), International Council for Local Environmental Initiatives (ICLEI)-Local Governments for Sustainability, Innovation Center for Mobility and Societal Change (InnoZ), Institute for Transportation and Development Policy (ITDP), International Union of Railways (UIC), Japan International Cooperation Agency (JICA), Partnership on Sustainable, Low Carbon Transport (SLoCaT), South Asia Co-operative Environment Programme (SACEP), TERI University, the Korean Transport Institute (KOTI), University of Gothenburg, SAFER - Vehicle and Traffic Safety Centre, the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), the World Health Organization (WHO),the United Nations Environment Programme (UNEP), Walk21, Smart Freight Centre, Stockholm Environment Institute, The International Centre Integrated Mountain Development (ICIMOD), Institute for Global Environmental Strategies (IGES), The Climate and Clean Air Coalition (CCAC), The World LPG Association (WLPGA), SHAKTI Sustainable Energy Foundation, Health Effect Institute (HEI), Centre for Science and Environment (CSE), the United Nations Human Settlements Programme (UN-Habitat), and the World Bank (WB), among others.

4. The Integrated Conference was attended by about 1000 participants from 40 countries comprising the member countries of the Regional EST Forum in Asia, city Mayors and local authorities, participants of the BAQ 2014, Subsidiary Expert Group members of the Regional EST Forum in Asia[1], international resource persons, representatives from various UN and international organizations, scientific and research organizations, multi-lateral development banks, non-governmental organizations (NGOs), representatives from the private and business sectors, as well as local observers and professionals from government and other sectors in Sri Lanka.

5. While the Bangkok 2020 Declaration (2010-2020) and Bali Declaration on Vision Three Zeros - Zero Congestion, Zero Pollution and Zero Accidents Towards Next Generation Transport Systems in Asia provides an important basis for countries and cities to develop and implement next generation transport solutions - including required transport infrastructure development - there is an expressed need to strengthen the implementation of sustainable transport towards poverty eradication, national productivity, human development, public health and safety, energy security, resilience of cities, improved accessibility, social equity, regional connectivity and economic integration and improved rural-urban linkage, among others, in post-2015 development era.

6. The participating mayors, city and local authorities unanimously adopted the Addendum to the Kyoto Declaration (2007) for the promotion of EST towards realizing resilient, smart and livable cities in Asia (Annex1).

7. The participants of the Eighth Regional EST Forum in Asia embraced the *Colombo Declaration for the Promotion of Next Generation Low Carbon Transport Solutions in Asia* (Annex 2). Noting the outcomes of the Climate Summit 2014 organized by the United Nations Secretary-General Ban Ki-moon with special emphasis on the Voluntary Commitments made on Transport: (a) The International Association of Public Transport (UITP): Declaration on Climate Leadership; (b) The International Union of Railways (UIC): Low-Carbon Sustainable Rail Transport Challenge; (c) The Urban Electric Mobility Vehicles Initiative (UEMI); (d) Global Fuel Economy Initiative - Public-Private-Partnership to double vehicle efficiency; and (e) Reducing Short-Lived Climate Pollutants – A Global Green Freight Action Plan, the participants expressed their interest in promoting collaboration among Asian countries for learning and sharing low carbon transport technologies and solutions and acknowledged the positive role of the Regional EST Forum in Asia and its partners in facilitating and supporting dialogues among Asian countries.

8. A number of pre-events and special events were organized under the overall framework of the Integrated Conference of BAQ 2014 and the Eighth Regional EST Forum in Asia. They include – Asia Auto Gas Summit and Cooking for Life, Consultation Meeting for the Joint Forum on Clean Air in Asia and the Pacific and the Fifth Governmental Meeting on Urban Air Quality in Asia, Doubling Fuel Efficiency of Vehicles in Asia: Tools and Methodologies, Using BenMAP-CE to Estimate Air Pollution Benefits, Household Air Pollution – Effects on Health and Climate Change, From the low-hanging fruits to high-hanging fruits: Capitalizing on Project Achievements, Scaling Up Sustainable Transport Solutions to Improve Quality of Life in Cities, Green Freight Day: Asia in the Changing World of Green Freight – Building Blocks for Green Freight in Asia, and Green Freight for the World, Improving AQ Monitoring Systems, Experts Group Meeting on Accelerating Fuel Economy

[1] The geographic coverage of the meeting encompasses 24 countries in Northeast, Southeast, and South Asia (Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, India, Indonesia, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, Timor-Leste, and Viet Nam) and the Russian Federation.

Policies in the ASEAN Region, AirNow-International – A Growing Community of Users, and Clean Air Asia Partnership Roundtable.

II. Opening Session

9. Welcoming the participants of the Integrated Conference, Mr. B.M.U.D. Basnayake, Secretary of the Ministry of Environment and Renewable Energy, Sri Lanka, highlighted the leadership and commitment of Sri Lanka to create a sustainable society and livable environment for future generations. With the growth in population and number of vehicles, it is of utmost importance for Asian cities to address the issue of air pollution immediately to prevent the deterioration of the quality of life in cities. He expressed hope that the Conference would be an important catalyst in initiating sustainable development projects and programmes that address sustainable transport systems and cleaner air for the people of Asia.

10. Delivering the opening remarks on behalf of CAA, Mr. Robert O'Keefe, the Chair of Clean Air Asia's Board of Trustees, mentioned that while sustainable transportation was a key need across Asia, air pollution and climate forcing gases are emitted by many sources. In addition to transport, in developing Asia, these include coal fired power and industrial plants, diesel generator sets, medium to small industrial sources, domestic boilers, open burning, windblown dusts and shipping. As per the World Health Organization (WHO) and the Global Burden of Disease, ambient air pollution from these sources, especially particulate matter (PM), account for well over 3 million premature deaths a year, of which fully two-thirds are in developing Asia. This is coupled with household air pollution from indoor cooking, which, on a global basis, extracts an astonishing 4 million premature deaths a year, largely from the most vulnerable of the population − mothers and small children − who also suffer from extensive respiratory and other diseases, and often miss school and work, helping to extend the cycle of rural poverty. This duality is well captured in the emerging paradigm of "total exposure from all sources" and collectively describes air pollution as the world's largest environmental disease burden. Clean fuels and advanced technologies that are available today can dramatically reduce emissions and, even in developing Asia where there are so many competing needs, are highly cost effective when avoided health costs are considered. Even as new regulations and distant reduction targets are promised, more is needed and follow-through and enforcement will be critical so that today's words become tomorrow's actions. The opportunity to act is clearly now**.**

11. Delivering the opening remark on behalf of UNCRD / UN DESA, Mr. Nikhil Seth, Director, Division for Sustainable Development, UN DESA, expressed his deep appreciation to the Government of the Republic of Sri Lanka for hosting the Integrated Conference of Better Air Quality (BAQ) 2014 and the Eighth Regional Environmentally Sustainable Transport (EST) Forum in Asia. The two distinct but interrelated issues - clean air and sustainable transport, together with the overarching theme emphasizing "Next Generation Solutions" are highly relevant to the discussions currently taking place at the United Nations around the post-2015 Development Agenda. Recognizing the previous accomplishments of Asian countries and cities, like the Bali Declaration on Vision Three Zeros, the Bangkok 2020 Declaration, and the Kyoto Declaration for the Promotion of Environmentally Sustainable Transport in Cities, he expressed his expectation that the Forum would adopt the "*Colombo Declaration for the Promotion of Next Generation Low Carbon Transport Solutions in Asia"*.

12. Delivering the opening remarks, Mr. Teruyoshi Hayamizu, Councillor, Minister's Secretariat, MOE-J, underlined the important role of Regional EST Forum in Asia. He highlighted the region's extraordinary rapid economic growth and urbanization over the recent years, which has brought significant changes in transportation modality including rapid increase of motor vehicles and their usage. As a consequence, increased air pollution and greenhouse gas emissions from traffic have caused various concerns, such as adverse effects to public health

and ecosystems associated with the expansion of polluted areas. He also highlighted how the experience of the Great East Japan Earthquake in 2011 reminded the critical importance of building resilient transport infrastructure and systems against large-scale natural disasters. He urged timely actions to reduce the suffering and environmental burden to the future generations. To this regard, Japan's experience in tackling the severe air pollution problems in the past could provide valuable means for international cooperation in EST areas, including sharing of advanced pollution abatement and low emission transport technologies to abate global climate change and regional air pollution.

13. Hon. Kumara Welgama, Minister of Transport of Sri Lanka, delivering his opening statement, mentioned that the human vulnerability to environmental change was reaching unpredictable levels. Sustainable development has now been recognized as the key to the long term persistence of any economic activity. An efficient transport system is vital to economic well-being and good quality of life. Reduction in vehicular pollution and sustainable transport infrastructure should therefore be considered a priority for sustainable development. When it comes to sustainable transport policy and programmes to safeguard air quality and human health, it is necessary to achieve systematic integration of numerous modes of transport with green infrastructure development. He finally expressed hope that the Conference would provide required pathways to achieve sustainability.

14. Hon. Susil Premajayantha, Minister of Environment and Renewable Energy of Sri Lanka mentioned that air pollution had become one of the most dangerous and most widespread aspects of environmental pollution especially in the urban areas of the world. Far-reaching impacts of air pollution are felt in health, economic and environmental sectors. Air pollution is now the world's largest single environmental health risk and reducing air pollution could save millions of lives. The transport sector, while being imperative to economic development, is the major contributor to air pollution. Therefore, it is important to introduce sustainable transport solutions that meet people's mobility needs while causing least pollution. Emphasis needs to be put on implementing non-motorized transport such as walking and cycling, and establishing efficient public transport systems rather than car centric development such as widening roads and building more roads. As Sri Lanka is emerging as a fast growing economy with booming industries and infrastructure development, the government of Sri Lanka has recognized the importance of preserving the environment for future generations. Sri Lanka has also taken necessary steps to improve fuel quality as well as to strengthen emission standards and vehicle inspection and maintenance regime to reduce air pollution.

15. The special message of UN Secretary-General Ban Ki-moon underscored the people's right to clean air and safe mobility. Air pollution, both outdoors and indoors, threatens the quality of life in many of Asia's cities. Traffic congestion and road accidents cause considerable economic losses to cities and countries. The transport sector is becoming the fastest-growing source of greenhouse gas (GHG) emissions. A systematic shift to sustainable transport, with cleaner vehicles, more efficient public transport and dedicated bicycle and walking lanes, is vital for a cleaner and safer future. As the Bali Declaration on Vision Three Zeros said, we need Zero Congestion, Zero Pollution and Zero Accidents. Participants of the 2014 Climate Summit, which aimed to galvanize the global community into action on climate change, recognized transport a key sector for reducing emissions and made important commitments in electric transportation, railways, public transport, fuel economy and green freight. The High-Level Advisory Group on Sustainable Transport aims to engage in innovative thinking and provide leadership within the transport sector. The message concluded with an appeal to the participating national governments, city and local authorities, private sector, NGOs, the scientific and research community, international organizations and donors to continue their essential work to develop smart, integrated solutions for clean air and sustainable transport.

16. Delivering the keynote address, Mr. Nikhil Seth, Director, Division for Sustainable Development, UN Department of Economic and Social Affairs, addressed the theme of transforming societies through next generation transport and clean air solutions in post-2015 development era. United Nations Member States have embarked on an ambitious and transformative plan to elaborate a post-2015 development agenda to place all nations and economies firmly on the path to sustainable development. Central to this agenda is the package of sustainable development goals, currently consisting of proposed 17 goals and 169 targets. Sustainable transport and better air quality feature prominently in a number of the proposed goals and targets. Sustainable transport is an important pathway to poverty eradication, better health, resource efficiency, decarbonization, decongestion, connectivity, trade and growth. While Member States debate the post-2015 development agenda, they are also working toward a new climate agreement in Paris in 2015. In support of this cause, in September, the Secretary-General convened a Climate Change summit in New York, where it was clear that the world recognizes the fundamental role of sustainable transport in a lower emission future. At that summit, global transport alliances announced initiatives to scale up low carbon technologies. These measures will increase the number of electric vehicles on the road, improve the efficiency of rail and air travel and transport, and enhance public transportation around the world. In addition, the Secretary-General has launched a High-Level Advisory Group on Sustainable Transport to provide leadership and innovative ideas for actions that can be taken at the global, regional, national and local levels.

17. While there are many challenges in terms of accessibility, rural-urban linkage, air pollution related premature deaths, countries and cities around the world, especially in Asia, are showing how transport can be sustainable, providing cleaner air and health and economic benefits. While Japan has earned the distinction of having the first eco-cities of the region that address resource efficiency with world class public transportation system and high speed railway networks, many Chinese cities have prohibited gasoline-powered motorcycles and scooters, which in turn has led to the development of high-quality electric bicycles and scooters. Similarly, the Republic of Korea has successfully implemented policies to support more sustainable urban transportation with priority to rail-centered transportation, bicycle infrastructure, green pedestrian spaces, green logistics, and green ports, among others, in truly transforming its cities.

18. The countries could consider a number of policy recommendations such as – a) *institutional reform for developing integrated solutions* - policies and institutional arrangements should be developed with integrated planning and strong partnerships with the private sector to promote transit oriented development and smart growth; b) *pricing reform* - most goods and services sold today fail to bear the full environmental and social costs of production and consumption, and the Asian countries need to deal with many hidden subsidies that benefit private car users in urban areas instead of promoting more sustainable modes of transport; c) *integration of climate change considerations and resiliency in overall transport policy, planning and infrastructure development* - a systematic shift to sustainable transport, with cleaner vehicles and more public transport including safe and dedicated bicycle and walking lanes in cities, could greatly help to move towards a low carbon development path; d) *innovations for improving and scaling up transport technologies and systems* - improving fuel efficiency by promoting lighter vehicle weight, aerodynamic designs, and fuel efficient tyres, and promoting renewable energy are key to mitigating local air pollution and climate change, and electricity and hydrogen can also offer potential opportunities to decarbonize the transport system; e) *strong leadership* - can facilitate international collaborative research, city-to-city cooperation, sharing of experiences, capacity building, technology transfer, and new innovative partnerships.

19. The special message of His Excellency Mahinda Rajapaksa, President of Sri Lanka attached strong confidence on the rise of Asia in the world to make it the 'Asian Century'. Asia should therefore lead in new

thinking and policies on sustainable development, climate change and environment matters that are of increased focus in international affairs and national policies. In Asia today, these matters deserve the most serious attention when Asia is in a phase of unprecedented urbanization, persistent economic growth, rapid motorization and industrialization, which is evident from the theme of the Integrated Conference - "*Next Generation Solutions for Clean Air and Sustainable Transport – Towards a Livable Society in Asia*". The conventional transport systems have contributed to traffic congestion, air and noise pollution, traffic accidents and fatalities, which affect the quality of life. The conventional transport system also leads to loss of economic opportunities due to rising delays in transport and wastage of billions of gallons of fuel at great cost to the economies. The WHO statistics on health impacts of air pollution in Asian region call for the most urgent actions to curb this challenge to the societies.

20. Referring to His Excellency's statement at the recent 2014 Climate Summit held in New York, the message stated that the imperative need for a Clean Development Mechanism (CDM) to reduce GHG emissions was for the developed countries to implement their commitments to the developing world by providing financial support, technology development and transfer, and capacity building support. But there is good news that the developing countries themselves are now discussing their own initiatives, which is in the true spirit of Asian cooperation towards achieving the goal of environmentally sustainable transport in cities and countries. Green economy is one among many valuable tools that could help countries transitioning to a path of more sustainability by minimizing negative externalities, which could ultimately slow down the growth of social and economic development in a country. The policy agenda of the Government, the Mahinda Chinthana, seeks to address climate change with increasing non-conventional and renewable energy contribution to the national power grid and importantly implementing a Green Transport System and a Fuel Quality Road Map. Sri Lanka is working on strategies to reduce emissions, strengthen climate resilience and combat global temperature rise in line with international commitments and scientific findings.

21. The dignitaries launched a Commemorative Postal Stamp to mark the Integrated Conference.

III. Implementing Bali Vision Three Zeros ~ Zero Congestion, Zero Pollution, Zero Accidents Towards Achieving a Livable and Sustainable Society in Asia

22. In the next 30 years, the world will have 2.5 billion new urban residents, with more than half in Asia; thus Asian countries must build more efficient, healthy and equitable cities. "Win-win" strategies that favor resource-efficient transport modes (walking, cycling and public transit) and limiting auto traffic (to what the urban road system can accommodate) can help achieve the goals of the Bangkok 2020 Declaration and the Bali Vision Three Zeros. Bus lanes transport far more people than cars using the same traffic lanes. Walking, cycling and public transit are also much more energy efficient, and transit-oriented cities tend to have much lower traffic casualty rates; a more diverse transport system is more affordable for consumers. Asian cities have an opportunity to achieve fewer traffic deaths through Transit Oriented Development (TOD) and Travel Demand Management (TDM) policies and application of advanced technologies, such as Intelligent Transport System (ITS), Intelligent Freight Systems (IFS) and dedicated Non-motorized transport (NMT) facilities.

23. Policy reforms reflecting a sustainable transport hierarchy will need to be developed and implemented to put into practice the proposed win-win strategies. There are various barriers that hamper these reforms. Asia's middle class is growing significantly faster than in other regions of the world, which has implications for car ownership and use. Few Asian cities have so far been able to control vehicle ownership. Several challenges and opportunities are shaping progress toward next generation transport systems to meet the aspirations underlined in Bali Vision Three Zeros (i.e. zero emissions, zero congestion and zero accidents). Air pollution/carbon emissions

continue to grow in Asian countries. Thus, it is crucial to reduce growth in vehicle travel and to make transport more fuel efficient and cleaner. Efforts to reduce motor fuel subsidies that can absorb up to 30% of the national budget can make financial resources available to fund more sustainable transport programmes and projects.

24. Congestion remains a challenge in a number of Asian cities. Several countries including the Republic of Korea and Nepal are increasing their focus on bike and pedestrian infrastructure, and are making plans to incorporate bus lanes with widened roads, but funding remains a critical issue and transformational change will require additional incentives. Road safety in Asian countries remains a critical issue; in several countries with high numbers of motorcycles, up to 80% of traffic accidents involve motorcycles. The growing use of electric motorcycles is increasing safety by decreasing vehicle speeds. Asian car companies were urged to ensure that all models produced for the Asian markets follow the same safety standards as those for export markets.
Planners, engineers and architects must play a pivotal role in working toward the goals of the Bangkok 2020 Declaration (2010-2020) and the Bali Vision Three Zeros. In all countries, resources are needed to ensure that local visions can be implemented; and to create more stable middle class research jobs and allow the next generation of transport visionaries to achieve transformational outcomes.

25. Asian countries are demonstrating many positive initiatives and after several years of discussing the need for and structure of sustainable transport. Asian countries are now discussing the implementation of sustainable transport. A number of institutional biases remain, which continue to favor auto-dominated policies over resource-efficient modes of transport. It is important for transport planning to shift from a time-saving to a distance-saving paradigm, to ensure universal, safe and inclusive access for all.

IV. e-Mobility as the Next Generation Solution for Clean Air and Sustainable Transport in Asia

26. Electric vehicle technologies have made significant advances in recent years, and a growing number of people are considering electric mobility as an option for addressing the challenging issues of rapid urbanization and motorization in Asia. While electric mobility may reduce energy use, air pollution and greenhouse gas emissions, it can do very little to solve traffic congestion or to resolve the conflict between vehicles and pedestrians. Therefore, electric mobility should be seen as a partial, rather than a complete solution, to achieve sustainable transport in the EST region.

27. Some Asian countries or cities are more proactive and successful than others in promoting electric mobility and in some of these more advanced countries and cities, national or city level initiatives are already put in place to encourage and facilitate the testing and use of electric vehicles. Very often, these initiatives are complemented with fiscal incentives and infrastructural support. Abundant clean and cheap sources of electricity are also important factors contributing to success. For instance, Bhutan's Electric Vehicle Programme is one such example that promotes environmentally sustainable transport by promoting a shift to e-mobility. Bhutan has also incorporated the promotion of electric mobility in its 11th Five-year Plan, and electricity-power delivery vans, taxis, public buses, three-wheelers and other forms of electric vehicles are being tested and used in countries like the People's Republic of China, the Republic of Korea, Japan, India, the Philippines and Nepal.

28. In other places, promotion of electric mobility has encountered a diverse set of challenges, including the issue of upfront vehicle cost, lack of charging infrastructure, lack of clean electricity supply, problems related to battery life, safety and disposal, the driving range of the vehicles, as well as vehicle reliability and durability in rugged terrain. The challenge of meeting consumer preferences and expectation is also a major barrier.

One important way forward is to foster a stronger public-private partnership at different levels, from information exchange, capacity building and knowledge transfer, to putting together local electric car-sharing and bike-sharing schemes. Such partnerships can benefit existing and planned e-mobility projects and programs in developing countries of the Asia-Pacific region.

29. One important recent opportunity to support e-mobility is the new Urban Electric Mobility Initiative put forward by UN-Habitat at the Climate Summit 2014, hosted by the UN Secretary-General Ban Ki-moon, which aims to increase the number of electric vehicles in cities to at least 30 per cent of all new vehicles sold on annual basis by 2030, as well as to develop the enabling infrastructure for their effective use.

30. Electric vehicles have demonstrated their advantages and are increasingly being proven commercially viable in urban passenger and commercial transport fleets. However, the policy decision to promote e-mobility as a means to achieving the Bali Vision Three Zeros has to be location specific. Also, any e-mobility initiative must go hand in hand with integrated planning of transport, energy, environment and other urban development policies in order to determine the pace of implementation and to get the best possible results. The challenge to address the handling of used batteries of electric vehicles is rising. Therefore, it is necessary to conduct more research to enhance the life of battery.

V. Improved Accessibility to Essential Utilities and Services – A Critical Need for Communities of Emerging Asia

31. Emerging cities in Asia have a way to go to promote appropriate physical access to resources and opportunities, and improve people's possibilities to make more sustainable choices in the way that they move themselves and their goods. Some cities have commenced to improve access by promoting walking, cycling and public transport in cities in an integrated manner. There is, however, considerable scope for better integration among sustainable modes to improve access. Walking is already a predominant mode in various cities across the EST region and these cities need to encourage walking and cycling by providing proper infrastructure facilities to make the modes safer and secure. This will require that various transport related policies and resources in emerging cities are better balanced between public transport, walking and cycling and those that are more private car oriented. This can best be achieved through integrated urban transport planning and by promoting participatory transport planning and prioritizing low cost strategies over solutions that require high up front investments. The ongoing paradigm shift towards implementing sustainable urban transport (SUT) in the EST region is likely to favor improved access.

32. Improving the accessibility in Asian cities, requires a clear concept of "Access", a strategy and a plan. The next generation transport planning defined by the Bali Vision Three Zeros fills this need. Next generation transport planning can support the goals of a city or country, i.e. sustainable development goals, climate change goals, creating livable cities. Comprehensive sustainable mobility plans can steer cities away from existing car dominated planning towards funding a transport system that caters for the needs and moves of people than automobiles. Examples from within the EST region as well as internationally (e.g. Brazil and Germany) show that next generation transport plans are an effective way to set strategic goals and link them to funding mechanisms, with the ultimate impact of realizing accessible mobility in cities. As next generation transport plans encourage integrated, socially-inclusive and economically feasible development of the transport sector, the Avoid-Shift-Improve strategy that underpins the Bangkok 2020 Declaration is increasingly embedded into transport planning at the national and local levels.

33. The integration of transport and land-use planning has proven to increase accessibility in urban areas. Failure to recognize the transport and land-use synergies lead to increased congestion, reduced air quality, loss of livability and inaccessible urban areas. Promoting safe, affordable and attractive public transport in cities has large potential to reduce negative symptoms of increased motorization and greatly increase access in urban and rural areas, when properly implemented.

34. Decision makers in the EST region are now increasingly considering the type of a public transport to choose. It has been shown that a bus-based system is a low-cost and an effective option for cities to implement a fast and affordable transport system. Yet in the medium and long term, a rail-based system can address higher demand and can be appropriate if density is high enough, thereby generating demand for such systems.

35. It is increasingly clear that improved access requires mass transit systems to be fully integrated with the other modes.

36. Putting people's need at the heart of transport planning is gaining ground in Asian transport planning. To strengthen this trend it is important to document successful case studies and ensure that enabling institutional arrangements are in place and that funding is available to implement more such access oriented transport planning.

VI. Road Safety and Injury Prevention – Indispensable for National Productivity

37. Safe urban transport has been an Asian EST goal since its first convening. In 2013, the Asian EST set a goal of zero traffic fatalities in the context of the Bali Vision Three Zeros. Road safety is also a global goal adopted by the UN General Assembly in the context of the 2011-2020 the Decade of Action on Road Safety (A/RES/64/255).

38. Improving road safety remains a challenging, yet important goal within the EST region. Currently, an average of 750,000 traffic deaths and 50 million injuries occur in the region annually. While some countries have made progress in reducing traffic fatalities, the overall number of traffic deaths in the region continues to grow. While traffic deaths decline as gross domestic product (GDP) goes up on average, at any given income level, traffic deaths can still vary widely depending on a country's strategies and vehicle kilometers traveled.

39. The victims of traffic deaths in Asia are not only tragedies in and of themselves, but also for households. The victims of traffic fatalities and injuries are disproportionately higher amongst the lowest income groups and people between the ages of 15-44 (when productivity is highest). Traffic deaths and injuries can have dire consequences for a family when a household's bread winner is killed or injured, making traffic safety also an important goal for poverty alleviation.

40. Further, such deaths and injuries make a large impact on national economies. Total annual costs of injuries and deaths are estimated to be $735 billion or 3.3% of GDP for the region. Collecting more and better data on traffic fatalities and injuries will allow countries to understand its true costs and help plan more effective solutions. Mobile technology may hold new opportunities for collecting data.

41. There was broad agreement that increasing punishments, monitoring, and enforcement for traffic laws by themselves, while needed, is not adequate in reducing vehicle crashes. Interventions are also needed to improve infrastructure design and implement policies, such as lower speed limits and helmet laws for two wheelers. Limiting vehicle speeds to 30 km/hr and street widths to less than 30 meters were shown to result in far lower

death and injury rates. Encouraging mode shift to public transit is another way to lower injury rates as injury is ten times less likely in transit.

42. Countries that have reduced traffic fatalities can also further improve road safety. Japan has already one of the lowest traffic death rates in the world and they are still decreasing, despite having many pedestrians and bicyclists. Yet, Japan still focuses on constant improvement on traffic injuries by identifying the most vulnerable users – currently the elderly and non-motorized transport users – and tailoring road safety interventions for them.

43. Prioritizing road safety and engaging in international cooperation to reduce traffic deaths is key to lowering global traffic deaths. Delegates of the EST Forum were made aware of plans to review international agreements on Road Safety and the opportunities this offers for EST member countries to better align road safety priorities and policies with global targets as well as the targets from the Bali Vision Three Zeros.

VII. National and International Effort on Low Carbon Technology Transfer and Infrastructure Development in Transport Sector

44. The Colombo Transport Master Plan (CMP) is a significant example of how EST countries are integrating messages from previous EST Forums and the resulting Declarations on EST in long-term plans for incorporating low-carbon transport. Expected benefits of the CMP include not only improved access and reduced travel time, but also climate change mitigation and road safety. The CMP demonstrates that as levels of ambition in national planning processes increase, so do challenges, including coordination issues and setting realistic project timelines among various ministries, and required coordination among donors in developing feasibility studies (e.g. JICA) and implementation plans. Importantly, the CMP presents an example that offers potential learning for other countries within the EST region.

45. Presentations from ADB, MoE-J and JICA suggest transformational changes among bilateral and multilateral development agencies. Emerging priorities of these organizations, which include target setting and changes in the type of projects funded (more urban and public transport and less road building) clearly illustrate that the messages of the Bangkok 2020 Declaration and the Bali Vision Three Zeros are beginning to take hold. For example, while acknowledging that many countries continue to require roadway investments, these projects increasingly incorporate safety and climate impacts; furthermore, development agencies have introduced a climate risk assessment, which triggers adaptation measures under high-risk scenarios. Best practices on low-carbon transport were also presented (e.g. R&D, fuel efficiency, modal shift), while noting that development agencies continue to gain experience and technical expertise to increase involvement in urban transport projects.

46. An innovative new modality, the joint crediting mechanism (JCM) was presented that can be used to channel climate finance into the transport sector in the EST region. JCM has two basic requirements to guide project eligibility: first, it must facilitate diffusion of Japanese low-carbon technologies that contribute to sustainable development goals in developing countries. Second, it must contribute to quantitative GHG reductions to count toward Japan's emission targets that are screened via Monitoring Reporting and Verification (MRV) methodologies. This mechanism will contribute to the United Nations Framework Convention on Climate Change (UNFCCC) objectives to facilitate global actions for GHG emission reductions to complement the Clean Development Mechanism (CDM).

47. JCM presents a promising addition to financial instruments for transport and has demonstrated early success. Japan has signed bilateral JCM documents with seven EST countries since 2011 (Mongolia, Bangladesh, Maldives, Viet Nam, Lao PDR, Indonesia, and Cambodia) to support project implementation (e.g. eco-driving in Viet Nam). Capacity building and development of feasibility studies facilitate the development of JCM activities.

48. As countries become more ambitious in planning and implementation of low-carbon transport through processes such as the CMP, the scale of investments is increasing and coordination required for co-financing and technical assistance are growing as well. It is clear that strategies and priorities guiding their engagement with the transport sector have evolved in the past five years, and that these organizations are working, spending, and assessing in novel ways that are consistent with the recommendations of previous EST Forums. Though government ministries and development agencies still face a steep learning curve, key examples have emerged of operationalizing environmentally sustainable transport policies at national level with the assistance of development agencies.

VIII. Realizing Resilient, Smart and Livable Cities in Asia – Role of EST

49. While cities are the engine of economic growth, the 21st Century version of cities should also focus on resilience, smart growth and the ability to rise up to different types of challenge, such as providing a healthy living environment for people and supporting the mobility needs of the disadvantaged.

50. This has proven to be an acute challenge, as it is becoming apparent that urban transport, in particular road transport, is a key consumer of energy resources and a major source of air and noise pollution, traffic congestion and crashes. According to the latest studies, air pollution is the world's largest single environmental health risk, and the transport sector is a main contributor, posing serious threat to human health, safety and well-being.

51. To reverse the trend, policy makers have to look for integrated solutions that would result in the greatest health co-benefits. One possible direction is to invest in a transport system that integrates walking, cycling and public transit. Non-motorized transport (NMT) has been a neglected subject in terms of transport investment and planning. Walking, for example, will reduce people's health complaints, such as obesity and heart disease. Fewer vehicles on the road will also reduce traffic accidents and people's exposure to toxic air pollutant and traffic noise at the roadside. However, making piecemeal improvements to the walkways or cycle ways is not good enough. Transport planners have to take a holistic approach to taking care of issues such as safety, security, priority, accessibility, comfort and enforcement to improve walkability of a city.

52. Improvements in sustainable transport can go hand in hand with strengthening or restoring urban ecosystems. Asian countries and cities can emulate the examples of those cities (e.g. Seoul) that have taken measures to actively restore urban ecology.

53. The key to avoid motorized travel and to shift motorists into using public transit, walking and cycling is to provide a seamless, integrated transport system that is designed around customers' requirements. It should involve the provision of seamless transfer arrangement, implementation of an integrated fare and ticketing system, dissemination of traveller's information, and giving public transit priority over personalized travel. The transport system developed in the Republic of Korea is a prime example of how public transit can be reformed to become an attractive choice for the residents.

54. In this respect, city mayors and decision makers are taking different pathways to meeting their own sustainable transport objectives and achieving their sustainable development goals. While some cities are more focused on improving their public transit system rather than promoting NMT, other cities are putting emphasis on system resilience due to their vulnerability to natural disaster and climate change impacts. Shanghai, for example, has put in place a car license auction system for containing vehicle growth. Cebu, on the other hand, has reacted to the vulnerability of the city and their transport system by developing a bus rapid transit (BRT) system, which is more climate resilient than a rail based system.

55. No matter which pathways and what pace they are taking, city mayors are increasingly well aware of the scale of the challenge, and the type of resources that are required or the institutional changes that have to be made, in order to address local mobility needs, improve quality of life and safety, as well as to throw support to the transport related commitments that were made at the UN Secretary-General's Climate Summit 2014.

56. To give voice to their increased awareness, seventeen (17) Asian mayors and local authorities adopted the Addendum to Kyoto Declaration on Environmentally Sustainable Transport. This Addendum provides new impetus on action on sustainable transport by aligning the 2007 Kyoto Declaration with the goals and targets included in the Bangkok 2020 Declaration on Sustainable Transport (2010) and the Bali Vision Three Zeros.

IX. Country Initiatives and Achievements on Implementing EST Goals of Bangkok 2020 Declaration (2010-2020)

57. Presentations were made by Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Republic of Korea, Russian Federation, Singapore, Sri Lanka, Thailand and Viet Nam. The countries presented achievements and challenges in pursuing the targets of the Bangkok 2020 Declaration and the Bali Vision Three Zeros. A wide range of initiatives have been implemented, are underway, or are being planned.

58. There is a clear recognition of the need for comprehensive environmentally friendly policy and planning in transport, irrespective of the countries' stage of development. Implementation is already ongoing in several cases, and progress on sustainable transport policies is becoming apparent, in particular in the area of personal mobility, but less so regarding freight transport.

59. Countries are increasingly developing and adopting policies and strategies to incorporate EST principles. Several countries are building technical and organizational capacity to better plan and manage transport as well as measure related problems like air pollution.

60. Support by international organizations in capacity building, funding and implementation continues to be vital to proceed towards more sustainable transport practices, especially in the smaller countries in the EST region. The Avoid-Shift-Improve paradigm is increasingly guiding transport policy and planning.

61. 'Avoid' strategies focus on land use and transport integration, mixed land use and the use of information and communications technologies (ICT). Myanmar and Maldives reported on the development of urban transport master plans as have other countries. Japan has a law on low carbon urban development, which plans for intensification of urban functions and promotion of use of collaborative public transport. Several countries are starting to integrated land-use and transport planning. In terms of mixed-use, higher density development, most countries are still at an early stage.

62. Countries such as Myanmar and Russian Federation are increasing parking prices to reduce parking demand. Bangladesh mentioned their plans and activities for car free zones and car free day.

63. "Shift" strategies involve NMT, public transport improvements, TDM, more sustainable intercity passenger and goods transport. Public transport is high on the agenda of all countries and almost all countries are planning to improve public transport. Development of BRT systems were reported from several of the countries together with efficient connectivity between different public transport modes and NMT is part of many transport plans. The shift to NMT runs into barriers of different kinds impeding on its implementation. Afghanistan is developing international rail connection to neighboring countries. Bangladesh also introduced commuter trains from the capital city to surrounding cities. The Russian Federation and Myanmar are improving railway networks for passenger and freight movement. Inter-modality is a theme in all countries and most cities, including the maritime sector. Several sea nations brought up there special needs and the Maldives is working hard to promote biofuels within the transport sector.

64. Bangladesh, Malaysia, Nepal and Pakistan mentioned prioritizing the improvement of public transport and encouraging shift to bicycle paths and BRT. Thailand highlighted their NMT master plan under their EST Strategy. The country has currently implemented 185km of bike lanes and a bicycle sharing scheme.

65. "Improve" refers to better fuels and technologies, fuel efficiency, and vehicle emissions, inspection and maintenance, ITS and efficient freight solutions. Policies on cleaner fuels and vehicles are in place in most countries. The use of alternative fuels like compressed natural gas (CNG) in Pakistan and Afghanistan is stressed. Nepal has adopted an eco-friendly policy, which aims to promote electrical or renewable energy for 20 of the fleet and scrap older vehicles. Sri Lanka, because of innovative tax systems, has promoted hybrid vehicles and is now the country with the highest share of hybrid vehicles among new vehicles sold.

66. Progressive fuel quality standards are being implemented in all countries and increasingly the gap in fuel quality between developing Asia and the developed world is closing. Import policies are used to improve environmental performance of vehicles. On ITS measures, the Philippines is developing automated fare collection, Indonesia is preparing for electronic road pricing in Jakarta as well as an e-ticket system for BRT. Bhutan is working on traffic management and control by means of, for example, speed cameras and exempts electric vehicles from taxes. Inspection and maintenance programmes for vehicles are ongoing in all countries, but some face challenges in implementation.

67. The Maldives has established a pedestrian island and is providing fiscal benefits for electric and hybrid vehicles. Several countries are improving inspection and maintenance systems to reduce air pollution from vehicles. Myanmar has now established National Road Safety Council (NRSC) and National Road Safety Action Plan to improve road safety. Despite of having an upward trend in motorization, Bangladesh has managed to reduce the number of road traffic accidents and fatalities. Car-free and public transport days are common in Indonesia.

68. Key challenges identified included: rapid increase in vehicle ownership, lack of investment, technical and financial support for developing transport systems, and regulatory and institutional challenges.

X. Intelligent Freight System (IFS) for Improved Productivity and Energy Security in Asia

69. Intelligent Freight Systems (IFS) are necessary for a modern economy. Asia is poised for explosive growth in freight, with one of every two trucks worldwide sold in Asia, and with 50% of new roads and 25% of new rail to be constructed in India and the People's Republic of China by 2050. However, the freight sector in Asia remains inefficient, with logistics costs accounting for 15-25% of GDP in Asia (vs less than10% in US/Europe), and up to 40% of trucks trips in Asia are empty (vs. around 25% in US/Europe). There is significant potential for improvement through existing measures (e.g. truck tire technologies in the People's Republic of China could save 20 million tons of CO2 per year). Intelligent Freight Systems can further improve freight systems through the use of new, often telematics based, technologies. Effective Intelligent Freight Systems will require: (a) holistic views of processes in chains and freight transport; (b) inclusion of all technological and spatial dimensions; and (c) consideration of private sector goals (energy and cost savings) and public goals (external/societal goals).

70. To create win-win IFS policies, it is necessary to align public sector goals and private sector goals. To maximize efficiencies in the freight and logistics sector, policy makers should let the private sector determine the most efficient and economical solutions to scale up green freight initiatives. Strong policies are critical to facilitate the ample opportunities for improvement in creating a more efficient and sustainable freight sector in Asia. Nevertheless, freight still lags behind passenger transport and thus requires increased attention in EST dialogue and strategy; furthermore, it is essential to approach freight and passenger transport issues in an integrated way.

71. The increased application of IFS will result in increased productivity and supply chain efficiency through greater labor efficiency, energy efficiency as well as decreased fuel costs. In addition to increased productivity, IFS will also reduce environmental degradation.

72. Overall, the EST region is making incremental progress toward enhanced green freight strategies in individual countries, and EST countries remain on track to implement a regional green freight agreement in a broader Asian context as called for in the Sixth and Seventh EST Forum. To this end, UN ESCAP will consult with its member countries in 2015 to assess how to best continue the development of a regional agreement on green freight in Asia, working from background papers on this topic from UNCRD and UN ESCAP (forthcoming). It was agreed that additional dialog would be required to ensure adequate progress in the development of a regional agreement on green freight in Asia.

73. Several organizations are undertaking initiatives on green freight in the EST region, either in specific countries, or sub-regions, like ASEAN, or across Asia. Representatives from these organizations indicated their interest to intensify their cooperation with the development of a regional agreement on Green Freight in Asia coordinated by UNCRD with active engagement from UN-ESCAP. A new report "State of Play: Green Freight in Asia" was launched which describes efforts across the region to develop green freight.

XI. Expanding Railways – A Vital Means to Meet the Growing Transport Demand in Asia

74. Increased global rail investments and mode shift to passenger and freight rail are essential to meeting a two-degree Celsius climate change scenario (2DS), and Asia must play a central role in this task. Asia (including the Russian Federation) accounted for 71% of global passenger rail traffic and 57% of global freight rail traffic in 2011, with both passenger and freight rail volumes doubling between 2000 and 2011. According to the IPCC, transport passenger and freight demand will increase significantly by 2050, with the highest rates of growth in non-OECD countries in general, and Asia in particular.

75. However, investment in rail infrastructure in recent years has not kept pace with projected demand for transport across the Asian region, and modest increases in the length of the rail network are overshadowed by greater increases in the road network.

76. The People's Republic of China has more than tripled the amount of paved roads from 2000 to 2011, and India has increased its road network by 60% in the same timeframe, while the rail network has grown little by comparison (14% in the People's Republic of China, 7% in India, respectively). Policies that favor road development at the detriment of rail are likely destined to be more unsustainable, as these investments lock in high-carbon transport for years to come.

77. The expansion of rail transport is a key element in strengthening regional connectivity in the EST region as part of building stronger economic integration that will require additional transport effort.

78. The International Railway Association (UIC) has proposed a Low Carbon Rail Transport Challenge, which was launched at the UN Secretary-General's Climate Summit in September 2014. Since CO2 emissions from global railways account for less than 1% of total emissions, the challenge is to push passenger and freight transport volume from road to rail. UIC's target is to increase the mode share of passenger rail by 50% in 2030 and 100% in 2050, compared to a 2010 baseline. For freight transport, the target is to equal the mode share of road freight by 2030, and to exceed it by 50% in 2050. These targets constitute the minimum levels of mode shift to achieve a 2DS scenario.

79. National governments must play a major role in meeting this challenge, by creating comprehensive long-term policies to invest in new rail projects (e.g. urban rail, freight corridors) and to upgrade existing rail infrastructure (e.g. track electrification, removing bottlenecks). The private sector must also respond to this challenge by providing innovations to drive down costs of future rail investments. The use of Public-private partnerships to advance the large-scale expansion of rail-based transport should be considered more actively. Finally, international institutions must support the development of passenger and freight rail by financing rail investments and technology transfer, and providing funding for capacity building.

XII. Private Sector Financing for Next Generation Transport Infrastructure

80. Global transportation costs and investment requirements could require as much as 500 trillion dollars to be spent globally between 2010 and 2050. Growth will be especially high in Asian countries, which will require huge amounts of investment to develop transport infrastructure and services. Yet, these countries face great uncertainties in the exact nature and amount of those future investments. At this time, countries are challenged to identify the amount of current spending on transport, and how this breaks down. Looking to the future, countries need clarity on how future strategies affect financing needs, and where financing can be obtained.

81. The wide scale adoption of Avoid-Shift-Improve based policies and investment programs can result in net savings of over 50 trillion dollars in reduced vehicle purchases, infrastructure and fuel costs. This amount would go up further if more aggressive shift towards public transport would take place. These calculations do not yet include additional co-benefits derived from sustainable transport, such as improved road safety and air quality, and reduced travel time, which would make a shift towards sustainable transport even more economically compelling.

82. As urbanization occurs throughout many countries in Asia, the amount of finance required to properly satisfy development needs will far exceed the capacity of public sources to provide. Therefore, innovative funding solutions that are able to take advantage of private finance, both domestic and foreign, are needed. These models could include Public-Private Partnerships, Green or Carbon bonds, and the leveraging of Multilateral Development Bank financing to attract private investment.

83. While some successful examples of private investment have been seen in Asia, including some Bus Rapid Transit projects, other countries that have attempted to attract private investment into transport projects have faced a lack of interest from private investors. It was proposed that several conditions are needed to encourage private sector investment. Legal frameworks must exist to reduce risks for investors and at the same time, capacity of municipal and national finance departments must be built up to take advantage of those frameworks. Part of this capacity building should be in identifying the types of transportation projects that successfully make use of innovative finance mechanisms such as PPP financing. A survey of successful (and unsuccessful) projects across the region would serve this need.

84. Finance systems alone do not ultimately pay for projects. Loans need to be repaid, and this requires close attention paid to funding and revenue streams. Funding can come from multiple sources. Taxes from fuel and vehicle sales can be utilized to pay for transportation projects (transport pays for transport projects). Similarly, user fees and developer fees can be utilized to secure financing and ensure financial sustainability of transport projects. Land value capture is another potential funding source.

85. Finally, sustainable transport development has the potential to reduce total investment requirements over the coming decades. In the long term, transit and non-motorized transport development could be less costly to build and maintain than conventional personal car-oriented development patterns.

XIII. Next Generation Sustainable Transport Solutions in post-2015 Development Era

86. Cities require four critical elements to grow investment in sustainable transport: ability to raise dedicated funding streams, access to debt finance, implementation capacity, and a pro-transit mandate. In cases where cities lack all four of these elements, national policy may intervene to bridge gaps. Indicators for national progress include rapid transit to resident ratio, expenditure per capita on rapid transit to resident ratio, expenditure per capita on rapid transit, debt-equity ratios, etc.

87. Through the post-2015 development agenda to be formally adopted in September 2015, countries will adopt Sustainable Development Goals to replace the Millennium Development Goals. These will include goals, targets and indicators, defining what needs to be achieved and how to achieve it, including financing, technical cooperation and capacity building as well as a system of measurement to ensure we are on the right path to sustainability. The EST Forum can contribute to this by aligning its goal and target structure with the SDG structure. This will facilitate reporting to governments on progress on realizing sustainable transport in a manner that is action oriented.

88. The importance of appropriate national and local government policy to identify sustainable transport alternatives was highlighted as well as ways and means that ensure their implementation. Governments are facing a major international agenda on climate change where all will need to contribute while accommodating national circumstances. Many of the currently proposed SDGs involve transport related targets, including urban transport,

health and respiratory disease, road safety, infrastructure and jobs, and national and local policies will need to indicate how these can be simultaneously implemented in an effective manner.

89. Current transportation development paradigms have generated negative environmental, social, and economic impacts, reflected in high road fatalities, poor accessibility, greater air pollution and chronic traffic congestion in large cities. Several countries in Asia have extensive policies in place and see the shift to sustainable development including mass transit as essential but financing remains a major stumbling block even with the growing variety of options across public, public private partnerships and donor funding.

90. Many countries in Asia are still suffering significant budgetary stress due to legacy fuel subsidies. There is some optimism that with the right political will, subsidies can be shifted with at least some funding going to more sustainable transport through nationally lead structures that bring together various government authorities with integrated policies and joint action in support of scaled up and more effective implementation.

91. Some countries are facing a major challenge to shift passengers to public transport, having subsidized transport for children and aging populations, they find other segments more unwilling to shift. There is a need for sharing experience and successful models of how to create such a shift. Limiting the import of old and poorly performing cheap vehicles was being implemented by one country. Also, having a comprehensive master plan including identification of transit-oriented development was shown as useful. While challenges for small cities remain, advance planning is always considered advantageous.

92. It was expressed that by sharing information, common but adapted solutions could be found in the region. One country outlined its success in creating air quality and transport data that could be shared with the public to inform and gain acceptance for more sustainable less polluting transport.

93. It was noted that marine transport is a significant issue with special technical needs in the Asia Pacific region that are not being addressed by the EST forum.

XIV. Next Generation Clean Air Solutions for a Liveable Society in Asia

94. The Clean Air sessions and air quality related pre-events of the Integrated Conference highlighted the emerging global and regional consensus on the imperative for urgent action on air pollution. It emphasized the need to address the main sources of urban air pollution. It focused on the health and environmental impacts of air pollution and expounded effective air quality management and co-benefits approaches that mitigate climate change. In addition, innovative solutions (such as technologies, policies and practices, communication) and the need for behavioral change were presented.

95. There are clear indications of an emerging consensus among countries in Asia and around the world on the need for more urgent action against air pollution.

96. The importance of air pollution as a sustainable development issue with linkages to food security, water security, human health and global warming was highlighted. The resolution at the First UN Environment Assembly calling for global action on air pollution was brought to the attention of the participants and they were reminded of the need for governments to formulate action plans, establish and implement nationally determined

ambient air quality standards. A group of interested countries under the leadership of WHO is helping draft the first WHO assembly resolution on air quality and health, expected to be presented to the assembly in 2015.

97. Global burden of disease estimates for air pollution are much higher than previously estimated, especially for fine particulate matter (PM2.5). Transportation and energy sectors are key sources of urban air pollution. In many parts of Asia, urban populations are being exposed to short-lived climate pollutants and air pollutants from biomass burning for cooking and heating in the home, from street cooking and burning of solid waste and agricultural waste in surrounding areas.

98. The effectiveness and scale-up potential of several transport policies and solutions was discussed: (a) improving fuel and vehicle emission standards, (b) reducing emissions from marine vessels, (c) creating a credible transportation dataset to aid policy making, and (d) novel campaigns for promoting non-motorized transport.

99. Improving the fuel efficiency of vehicles can be a cost-effective strategy for reducing transport-related CO2 emissions and the cost of oil importation. Asian countries could benefit from strategies such as CO2 labeling, standards, fiscal incentives, better maintenance and driver training. Roadmaps for regional cooperation will be needed to minimize costs and accelerate the adoption of fuel economy strategies in Asia. The need to review and update fuel quality and vehicle emission standards in many of the countries in the region is becoming of great importance. The use of advanced options for testing and controlling emissions from in-use vehicles is already on the horizon, but important and urgent issues, such as the influx of poor second-hand vehicles, weak regulatory agencies and ensuring quality in vehicle inspection and maintenance systems, must be addressed.

100. Marine transportation and the operation of ports are also significant sources of air pollutant, greenhouse gas and black carbon emissions. Improving fuel quality for marine vessels is a key priority as it leads to immediate reduction of air pollutant emissions and toxic residues and enables the use of other emission control technologies.

101. A credible transportation dataset is important in developing effective transportation policy and strategy. Successful vehicle inspection and maintenance regimes have strong data systems as the backbone. The advances in information technology provide opportunities for increased public participation in urban and transportation planning through the use of apps. An improved WALKABILITY app was launched that enables pedestrians to audit a footpath's walkability giving feedback to local authorities on the state of walking facilities. The app uploads geo-tagged images of walking paths, weather information, and allows the extraction of the crowd-sourced data for further analysis to aid decision making.

102. Innovative behavior change campaigns can encourage people to favor non-motorized transport over motorized transport. A new "WALK" campaign was launched at the Integrated Conference that aims to nudge people to drive less and walk more; it involves the dissemination of signs that remind people of the benefits of walking.

103. ASEAN countries, along with the People's Republic of China and India, are shifting the center of gravity of the global energy system to Asia. The increase in energy demand in this region has expanded by two and a half times since 1990 and economic trends suggest further growth. Coal is an important fuel for Asia and its use is expected to increase because of its abundance and low cost. Half of the demand for electricity will be met by coal by 2030. Technologies exist to reduce pollution from coal power plants, but costs and other issues constrain widespread adoption of these measures. Mercury emission control measures from coal power plants could also reduce emissions of other pollutants. Computer models, combined with monitoring, provide a scientifically robust

way to help policy makers and stakeholders in Asia decide where control measures would be appropriate and effective.

104. In addressing deteriorating air quality and climate change, Asian cities have the multiple challenges of limited financial, human and technical resources, especially in smaller cities. While air quality data in Asia is increasingly more available, several issues on air quality monitoring systems used remain. These include limited number of stations and monitoring of few criteria pollutants, data quality issues and overall quality assurance and control procedures. Moreover, sustainability of the monitoring system is a continuous challenge especially due to financial constraints. Good practice examples can show other cities how to address technology, financing and overcome other barriers. Innovative solutions proposed to address air quality monitoring challenges included establishing regional centers for air quality monitoring and developing monitoring systems that integrate a range of monitoring devices (including low cost ones). A new report "Improving Air Quality Monitoring in Asia: Good Practice Guidance," which describes good practices for air quality monitoring systems and builds on lessons learned from the experience in Asian countries and cities, was launched. The report builds on a baseline survey of air quality monitoring systems in close to 70 Asian cities and field visits to monitoring sites of over 15 cities.

105. The communication of air quality data is a key component of air quality management. A number of Asian cities have developed innovative approaches to inform citizens of the state of air pollution. Similar approaches could be adopted and applied elsewhere. In addition, a number of tools currently exist to present air quality data and to determine the health benefits of interventions to address air pollution to different stakeholders.

106. Cities surrounded by or near mountains face additional challenges in managing air pollution due to topography and meteorological conditions. Policies backed by scientific understanding of sources and dispersion of mechanisms in these cities is required to design effective solutions to air quality problems. Knowledge sharing between mountainous or high regions in Asia needs to be strengthened.

107. Asian cities have a key role to play in reducing GHG emissions and short-lived climate pollutants. Emerging climate finance instruments, such as Nationally Appropriate Mitigation Actions, auction facilities and climate bonds, have the potential to direct cities towards low emission development pathways by supplementing domestic resources to fund capital-intensive low emissions projects. However, cities need assistance in maximizing the benefits of tapping into these emerging financing mechanisms.

108. Smaller Asian cities are being supported by regional initiatives in developing and implementing clean air plans to improve air quality and achieve co-benefits. These have included increasing awareness of the impact of air pollution on health and wellbeing and developing appropriate mechanisms for stakeholder engagement. For clean air plans to be successful, they need to be integrated with medium to long-term development, transport and financial plans to ensure commitment. Cities in addressing air pollution should first focus on sources under their control and sources they can influence in order gain rapid benefits. Smaller cities can benefit from learning from other similar sized cities.

109. City associations and international air quality and climate experts recognized that the innovative city certification framework deliberated at the Cities Clean Air Partnership consultations has game-changing potential to drive measurable and replicable environmental results through city-level actions for clean air. These were among the reasons cited − it rewards city actions, generates virtuous competition among cities, and allows a city's progress in improving air quality levels and air quality management capacity to be measured over time.

110. The outcome of the Integrated Conference signals another step forward in combating the challenges of urban air pollution and its impact on human health, environment and climate change. Progress has been made to improve air quality in Asia since the inception of the Better Air Quality Conference twelve years ago, yet Asian countries and cities need to accelerate action if WHO air quality guidelines are to be met, and the health and wellbeing of urban dwellers protected, to achieve a livable society in Asia.

XV. The Way Forward

111. Strong leadership at the national and local level are key in translating the outcomes of the Eighth Regional EST Forum and advancing on the ground action in countries and cities in the EST region. This will help achieve better cities and better life in the spirit of the Bangkok 2020 Declaration, Bali Vision Three Zeros and Colombo Declaration.

112. Suggestions were made to include, or deepen, a number of areas in upcoming Regional EST Forums. This includes a possible focus on the specific transport challenges of Small Island Developing States (SIDS). This in combination with a focus on maritime transport, which is becoming an increasingly important topic of transport planning for several of countries in the EST region as well as ports.

113. Now that EST countries are making good progress with integrating EST related principles and goals in their national and city based transport policies and investment planning, the issue of funding and financing is gaining in importance. Participants requested a further deepening of discussions on different funding mechanisms, including public and private funding as well as development assistance and climate finance. To prepare for these discussions, it is important to determine funding needs (based on EST planning approach) and to study in more detail both positive and less successful examples of different financing approaches, especially those involving private sector financing, through, for example, Public Private Partnerships. This would also include capturing the increased values in land from the building of mass transit systems.

114. An area of continued importance that has not yet received the attention it requires is freight transport and logistics whereby especially green freight is of importance. This requires that efforts to promote dialog on effective action on green freight be stepped up. Such additional efforts on green freight will link up with the intensified attention on maritime transport and railways.

115. Progress in the implementation of different components of the Avoid-Shift-Improve approach varies with most progress having been made in the Shift (e.g. public transport) and the Improve (e.g. fuels and vehicles) components. Future actions will have to intensify those on the Avoid (e.g. land use planning, TOD, and TDM).

116. Rural transport was another area identified in discussions as being of importance to promote economic, social and human development including livelihood security of rural communities. Achieving sustainable transport will require that efforts to improve urban and national transport are balanced with efforts to improve the sustainability of rural transport.

117. The post-2015 development agenda is underpinned by the overarching goal of poverty eradication. The inter-linkages between sustainable transport and poverty eradication as well as human security came up repeatedly in the deliberations of the Eighth Regional EST Forum in Asia. A greater focus on the alignment of poverty

alleviation and sustainable transport is considered desirable and to support such better alignment the EST Forum could address this issue in the future meetings.

118. The Eighth Regional EST Forum in Asia confirmed the importance of railways, especially in the context of national and regional transport. The EST Forum can play a larger role in supporting the renaissance of railways in several parts of the EST region and thereby also provide support to the implementation of the Railway Commitment made at the UN SG's Climate Summit in September 2014.

119. Road safety is a human right and a source of human security. Its measures can significantly contribute towards economic growth, social integration, national productivity and human development. In order to build on the progress made in improving road safety it is important that countries in the EST region increasingly participate in, and coordinate with, regional and global processes on road safety.

120. In terms of the structure of the Regional EST Forum meetings, it was noted that the considerable progress by member countries in the implementation of the Vision, Goal and Targets of the different Declarations adopted by the EST Forum, including the Bangkok 2020 Declaration and the Bali Vision Three Zeros, merits a greater focus on presenting and discussing these country achievements in the future forums.

121. Following the agreement on the Addendum to the 2007 Kyoto Declaration, cities can intensify their action on realizing sustainable transport. Cities are to better exploit the intellectual, social, environmental, technical, cultural and financial capital they have been endowed with. Cities can seek support from the wide range of supporting organizations of the EST Forum.

122. The Regional EST Forum can also be an important resource for the newly established High-Level Advisory Group on Sustainable Transport by the UN Secretary-General Ban Ki-moon. The experience of the EST Forum since its establishment in 2005 has demonstrated in a convincing manner the contribution of sustainable transport to poverty eradication, better health, resource efficiency, de-carbonization, de-congestion, connectivity, accessibility, trade and growth, as well as resiliency. Different ways in which the EST Forum could interact with the High-Level Advisory Group need to be explored.

123. The Regional EST Forum can also act as the Asian voice on sustainable transport in the global discussions on the SDGs as well as on climate change. A better integration of transport in these processes will help countries and cities in the EST region in accelerating action on sustainable transport and thereby improving the quality of life.

XVI. Closing Session

124. Delivering the closing remark Bjarne Pedersen, Executive Director, Clean Air Asia, discussed the challenge we are facing due to air pollution in Asia. Ambient air pollution, especially particulate matter (PM), account for well over 3 million premature deaths a year, of which fully two-thirds are in developing Asia. If we want to put this in terms of an economic cost, the amount of air pollution is staggering: 3.5 trillion dollars a year in premature deaths and ill health – and the costs will rise without government action to limit vehicle emissions, according to the OECD. And this is not mentioning the lost quality of life and suffering from loss of quality of life for those affected and their families. There was a number of solutions showcased and debated at the conference – technologies, changes in policies and practices, communications and the need for behavioural change (of both citizens, practitioners and policy makers). Now it is time to move from pilots to mainstreaming the solutions –

this requires investment, political will, communication and mobilization of key stakeholders using newest mitigation technologies.

125. Delivering the closing remark on behalf of UNCRD, Chikako Takase, Director of UNCRD, expressed her deep appreciation to the Government of the Republic of Sri Lanka for hosting the Integrated Conference of Better Air Quality (BAQ) 2014 and Intergovernmental Eighth Regional EST Forum in Asia, and to the Ministry of the Environment of Japan for its continued generous support for the organization of the Regional EST Forum in Asia for a number of years. She further expressed sincere appreciation to all national and local government representatives, resource persons, expert members and representatives of the international organizations for their active participation and valuable contribution for desired outcome of the Conference. The Integrated Conference took place at a crucial point in time, between the conclusion of work of the Open Working Group on SDGs and the start of the General Assembly (GA) on the discussion on the post-2015 Development Agenda. The outcome of the conference will provide a valuable contribution for this global process of chartering the post-2015 Development Agenda. This conference also witnessed two important additions of the EST process: the "Colombo Declaration for the Promotion of Next Generation Low Carbon Transport Solutions in Asia"; and the "Addendum to Kyoto Declaration for the Promotion of Environmentally Sustainable Transport ~ Towards Realizing Resilient, Smart and Liveable Cities in Asia", to carry forward on EST agenda. She praised the strong leadership of the national government representatives and local authorities to adopt these two important declarations, which are relevant in the post-2015 development context. Finally, she sincerely urged all international organizations, bilateral and multi-lateral donors, including multi-lateral development banks, such as the Asian Development Bank and the World Bank, to provide necessary technical assistance and support to the efforts of Asian countries and cities in the promotion of sustainable transport systems.

126. On behalf of the Ministry of the Environment of the Government of Japan, Mr. Teruyoshi Hayamizu, Councillor Minister's Secretariat, expressed his deep appreciation to all the speakers, panellists, chairpersons, facilitators and rapporteurs for the success of the Forum. He also appreciated the leadership and support of the staff members of the UNCRD, the Clean Air Asia and the Government of Sri Lanka who led this forum to a great success. He expressed his satisfaction with the progress the Forum had made within a limited amount of time, including the adoption of "Colombo Declaration for the Promotion of Next Generation Low Carbon Transport Solutions in Asia", which reaffirmed the countries' determination towards the further progress of the environmentally sustainable transport in Asia. Development of new technology, strong leadership, collection, analysis and sharing of relevant data, and good coordination among stakeholders are essential for establishment of a better transport system and to make it sustainable. Japan seems to be in an advanced position with regard to the application of EST, however, even Japan has quite a few things to do: e.g. reduction of CO2 emission, improvement of the level of PM2.5, more resilience to the old transport infrastructure, and reduction of bicycle oriented accidents, etc. He further urged to look for better solutions through discussions at the Forum, and confirmed Japan's willingness to provide continued assistance to the developing countries for EST projects, including the application of JCM (Joint Crediting Mechanism). He finally urged bi-lateral and multi-lateral donor agencies to provide necessary support in further strengthening and expanding the EST initiative.

127. Delivering the closing remark on behalf of the Ministry of Transport, Sri Lanka, Mr. J. M. Thilakarathna Banda, Additional Secretary of the Ministry of Transport, Sri Lanka expressed his deep appreciation to all the speakers, panelists, representatives from various organizations and institutions, including the United Nations Center for Regional Development, the Ministry of the Environment of Japan, the Clean Air Asia, for the success of the Integrated Conference. He further expressed his highest gratitude to His Excellency the President of Sri Lanka Mr. Mahinda Rajapaksha, to Honourable Minister and Deputy Minister of Transport and to the secretary

of Ministry of Transport for their directives, guidance and supports. He mentioned that the conference was held with broad views and the understanding of the participants on initiatives, best practices and future plans for improving air quality by implementing existing policies, programs and initiating more creative strategies aimed at focusing on transforming the world in to a global village with better air quality, while ensuring environmentally sustainable transport systems.

128. Mr. B.M.U.D. Basnayake, Secretary of Ministry of Environment and Renewable Energy, pledged the commitment of Sri Lanka towards achieving a low-carbon society, and expressed that the three-day programme was a milestone event in that respect. He stressed that the recent activities in Sri Lanka pertaining to the transport sector development planning have been done with an in-depth consideration of environmental aspects. The Colombo Metropolitan Transport Master Plan, which was presented at the conference, is a highlighting example on this. He expressed that these initiatives have been strengthened taking into consideration the Bali Declaration, where zero congestion, zero pollution and zero accidents for next generation transport systems are objectives. He further pointed out that through such efforts, Sri Lanka will commit to the regional and global climate change initiatives, particularly for the transport-related commitments on mobility; transit-oriented development; non-motorized transport (NMT); maritime transport; public transport; fuel economy; and green freight presented at the UN Secretary-General's Climate Summit 2014, and confirmed the intention to voluntarily develop, introduce and implement policies, programmes and projects in support of these transport commitments. He called upon development partners, foundations, NGOs; and the business sector to align their transport-related assistance with these commitments. Acknowledging the positive role of the Regional EST Forum in Asia, Mr. Basnayake wished that the cooperation among the regional countries for the sharing of knowledge, best practices, technology transfer on low carbon transport solutions, and transport safety, would support the promotion of low-carbon transport in Asia.

XVII. Mayor Summit

129. Mayor of the Colombo Municipal Council, Sri Lanka, Hon. Mr. Ahamed Jamaldeen Mohamed Muzammil, hosted the Mayor Summit on 21 November 2014, which provided a platform for developing mutual collaboration and city-to-city cooperation between the Colombo Municipal Council and participating Asian cities in the following areas.

1) Air quality improvement
2) Improved city
    a. Improved city walkability
    b. Electric three wheeler/ passenger car for taxi service
    c. Improved mass transportation
    d. Safe water supply and wastewater to energy
3) Pollution
    a. Improved air pollution
    b. Reduce noise pollution
4) Environmental health and sanitation
    a. Maternal and child health care
    b. Vegetable and fruits free of pesticides
    c. City food safety and hygiene

XVIII. Technical Field visit

130. Technical field visits were conducted on the last day (21 November 2014) of the Integrated Conference.

Annex 1: Addendum to Kyoto Declaration ~ For the Promotion of Environmentally Sustainable Transport ~ Towards Realizing Resilient, Smart and Liveable Cities in Asia

Annex 2: Colombo Declaration for the Promotion of Next Generation Low Carbon Transport Solutions in Asia

Annex 1

Addendum to Kyoto Declaration

For the Promotion of Environmentally Sustainable Transport ~

Towards Realizing Resilient, Smart and Liveable Cities in Asia

(Extended -20 November 2014)

We, the city Mayors and local government representatives (Dhaka North, Shanghai, Navi Mumbai, Tangerang, Yogyakarta, Vientiane, Ulaanbaatar, Kathmandu, Karachi, Baguio, Cebu, Singapore, Colombo, Matale, Bangkok, Chiang Mai, Kyoto), having met at the Special Event of Asian Mayors of the Eighth Regional Environmentally Sustainable Transport (EST) Forum in Asia, held in Colombo, Sri Lanka, from 19 to 21 November 2014, unanimously endorse and sign the addendum to the existing Kyoto Declaration (2007), in order to demonstrate our continued interest in, and reinforce our resolve and commitment to the promotion and implementation of Environmentally Sustainable Transport (EST) in Asia,

Reaffirming and building upon the voluntary actions of participating member countries of the Regional EST Forum in Asia to achieve the twenty sustainable transport goals under the integrated Avoid-Shift-Improve strategy of the *Bangkok 2020 Declaration* (2010-2020) agreed upon at the Fifth Regional EST Forum in Asia (2010),

Recalling that the Rio+20 Outcome Document- *The Future We Want*, which recognized that transport and mobility are centre to sustainable development, and which called for the efficient movement of people and goods, and access to environmentally sound, safe and affordable transportation as a means to improve social equity, health, resilience of cities, urban-rural connectivity and productivity of rural areas,

Noting the role of sustainable transport in the Sustainable Development Goals, including a dedicated urban transport target under the proposed Sustainable Urban Development Goal, recommended by the Open Working Group (OWG) for adoption to the United Nations General Assembly,

Noting the priority given by UN Secretary-General to sustainable transport including the establishment of a Secretary-General High Level Advisory Group on Sustainable Transport as well as including 'transportation' as a separate action area in his September 2014 Climate Summit,

Noting the *Bali Declaration on Vision Three Zeros ‐ Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia* adopted at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post ‐ 2015 Development Agenda (2013),

Acknowledging the important role of Asian cities and local governments will play, given the unprecedented level of urbanization likely to happen worldwide, largely driven by Asia, over the next decades, in setting up and implementing a vision for sustainable cities, from the initiation of city planning and design through to revitalization of older cities and neighbourhoods, including developing most efficient modes of mass rapid transit (MRT) systems while maintaining and expanding the role of walking and cycling with prime importance to human safety and mobility,

Underscoring that inclusive, resilient and sustainable cities and human settlements as well as provision of access to safe, affordable, accessible and sustainable transport systems for all along with improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons, will be critically important areas for the international community to achieve under the post-2015 development agenda,

(1) Express our good-will intention to voluntarily develop, introduce, implement, and integrate more sustainable transport and urban planning policies, programmes and projects, including PPP (public-private-partnerships) funding next generation public transport, walking, cycling, and clean freight infrastructure developments, towards realizing resilient, smart and liveable cities,

(2) Adopt effective policies, regulations, and enforcement mechanisms to minimize fatalities and serious injuries due to road crashes and to curb health-impairing air pollution, with specific attention to health impacts of small suspended particulate matters (PM_{10}/$PM_{2.5}$) and smoke and to mitigation of other global warming pollutants,

(3) Progressively introduce and implement transport policies and programmes, which will emphasize more climate and disaster resilient transport infrastructures and services to have long term benefits for the society, and

(4) Make efforts to support and take part in regional or global initiatives to promote sustainable transport, technical cooperation, technology transfer at affordable cost, and acknowledge the important role of the Regional EST Forum in Asia to facilitate their engagement with such regional or global initiatives.

(5) We request international organizations and donors to realign their programes in the spirit of EST.

Annex 2

Colombo Declaration

For the Promotion of Next Generation Low-Carbon Transport Solutions in Asia

(21 November 2014)

We, the participants, who are representatives of member countries of Regional Environmentally Sustainable Transport (EST) Forum in Asia (Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Russian Federation, Republic of Korea, Singapore, Sri Lanka, Thailand, and Viet Nam), international organizations, bilateral and multilateral agencies, nongovernmental organizations, research organizations, and sustainable transport experts, having met at the Eighth Regional EST Forum in Asia, held in Colombo, Sri Lanka, from 19 to 21 November 2014, unanimously adopt the Colombo Declaration, in order to demonstrate our continued intention in, and reinforce our resolve and commitment to the promotion of low carbon transport in Asia,

Reaffirming and building upon the *Seoul Statement ~ Towards the Promotion of Environmentally Sustainable Transport (EST) for a Low-Carbon Society and Green Growth in Asia*, agreed upon at the Fourth Regional EST Forum in Asia (2009),

Reaffirming and building upon the voluntary actions of participating member countries of the Regional EST Forum in Asia to achieve the twenty sustainable transport goals under the integrated Avoid-Shift-Improve strategy of the *Bangkok 2020 Declaration (2010-2020)* agreed upon at the Fifth Regional EST Forum in Asia (2010),

Recalling the Rio+20 Outcome Document- *The Future We Want*, which recognized that transport and mobility are centre to sustainable development, and which called for the efficient movement of people and goods, and access to environmentally sound, safe and affordable transportation as a means to improve social equity, health, resilience of cities, urban-rural connectivity and productivity of rural areas,

Reinforcing the objectives of the *Bali Declaration on Vision Three Zeros ‑ Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia* adopted at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda (2013),

Recognizing the mandate of the United Nations Framework Convention on Climate Change as the lead process for developing intergovernmental agreements on climate change,

Noting the outcomes of the UN Climate Summit 2014 organized by the United Nations Secretary-General Ban Ki-moon with special emphasis on the Voluntary Commitments made on Transport: (a) The International Association of Public Transport (UITP): *Declaration on Climate Leadership;* (b) The International Union of Railways (UIC): *Low-Carbon Sustainable Rail Transport Challenge;* (c) The Urban Electric Mobility Vehicles Initiative (UEMI); (d) Global Fuel Economy Initiative - Public-Private Partnership to double vehicle efficiency, and (e) Reducing Short-Lived Climate Pollutants – A Global Green Freight Action Plan,

Noting the substantial potential for mitigation of emissions from all sorts of transport modes documented in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change as well as the substantive economic savings of adopting and implementing low-carbon transport policies by the International Energy Agency,

Noting the role of sustainable transport in realizing the Sustainable Development Goals (SDGs) and in particular the transport related SDGs and associated targets, recommended by the Open Working Group (OWG) for adoption to the United Nations General Assembly,

Noting the priority given by UN Secretary-General to sustainable transport including the establishment of a Secretary-General High-level Advisory Group on Sustainable Transport,

Acknowledging the rapid growth of greenhouse gas emissions from transport sector in urbanizing Asia, and the importance of promoting sustainable development for movement of people and goods, safe, low carbon transport through policies, programmes and actions that will result in the availability of appropriate transport infrastructure and services for shifting to most efficient, multimodal, integrated modes of passenger and freight transport along with improvement in the environmental performance of fuel and engine technologies,

Underscoring the enabling role of environmentally sustainable transport for Asian countries to reduce poverty, improve regional and rural-urban connectivity, and achieve sustainable development,

(1) Applaud the efforts of UN Secretary-General Ban Ki-moon to promote action on Climate Change in the context of Sustainable Development and to make transport one of the specific areas of action in the UN Climate Summit 2014;

(2) Express our support for the transport-related commitments on mobility; transit-oriented development; non-motorized transport (NMT); maritime transport; public transport; fuel economy; and green freight presented at the UN Secretary-General's Climate Summit 2014, and confirm our intention to voluntarily

develop, introduce and implement policies, programmes and projects in support of these transport commitments;

(3) Call upon our development partners in the international development community (both multilateral and bilateral development partners); foundations and NGOs; and the business sector to align their transport-related assistance with these commitments presented at the UN Secretary-General's Climate Summit 2014 and national plans and programmes. This includes the provision of support for capacity building and setting countries EST Strategy, as well as financial support for implementing such commitments;

(4) Express our intention to make use of mechanisms under the United Nations Framework Convention on Climate Change, including the Clean Development Mechanism, Clean Technology Center and Network, the Global Environment Facility, the Green Climate Fund and Nationally Appropriate Mitigation Actions (NAMAs), to support the promotion of low carbon transport in Asia. Likewise, this also applies to climate change related mechanisms that are not part of the United Nations Framework Convention on Climate Change, such as the Climate Investment Fund; and

(5) Agree to share best practices of Asian countries and promote learning, cooperation and technology transfer on low carbon transport and solutions, transport safety, and acknowledge the positive role of the Regional EST Forum in Asia and its partners in facilitating and supporting the dialogue among Asian countries.