Comments on Draft Conclusions from Co-Chairs of the Ad Hoc Working Group on the Paris Agreement (APA)

Partnership on Sustainable Low Carbon Transport (SLoCaT) - April 2017

This submission was developed by the Secretariat of the SLoCaT Partnership, with active support from a number of SLoCaT members and is made on behalf of the full SLoCaT membership listed in Annex 1 in response to the draft conclusions from Co-Chairs of the APA, as summarized in paragraph 21:

21. The APA reiterated its earlier invitation to Parties and admitted observer organizations to provide information, views and proposals on any work of the APA before each of its sessions

SLoCaT Partnership (via UNFCCC accredited SLoCaT partner(s)) submits the following comments in two sections: (I) general comments on the position of the transport sector relative to the APA; and (II) specific comments on APA agenda items 3-8.

I. General Comments on the Position of Transport Sector

A. Global Macro-Roadmap: An Actionable Vision of Transport Decarbonization

The Paris Agreement sets an overall long-term direction for climate change policy which should be in line with the ambitious target of limiting temperature increase. For the Transport sector, the goal is to largely decarbonize and move from 7.7 Gt emissions/year down to 3 or 2 Gt by mid-century. Transport will need to be part of a “net-zero emission” economy, in which remaining emissions from specific sectors will need to be sequestered or off-set through other means.

SLoCaT through the Paris Process on Mobility and Climate (PPMC) proposes the development of a Global Macro-Roadmap; a phased action process, covering a 2020-2050+ timeline and thereby covering both short as well as mid- to long-term actions. This Roadmap aims to give a realistic (technically feasible) vision, with an operational focus for each segment of the transport sector (people and freight; road, railway, aviation, waterborne; urban and rural). It is driven by new sustainable and inclusive growth opportunities called for by the.

The Roadmap identifies a balanced package of actions taking into account the main sustainable transport paradigm which combines Avoid (reduce unnecessary travel

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1 SLoCaT Secretariat would like to thank Despacio and Victoria Transport Policy Institute for providing inputs to the development of this submission
through e.g. land use planning or logistics redesign and halting counterproductive regulation that incentivizes travel by individual motorized vehicles), Shift (shift movement of goods and people to the most efficient modes, by scaling up good practices) and Improve (improve environmental performance of fuels and powertrains, intermodality and transport management). Avoid and Shift strategies in particular can help to achieve SDGs, as improved walking, cycling and public transit conditions provide affordable transport to economic opportunities for disadvantaged groups, and many of these strategies also increase traffic safety, thus reducing road deaths and injuries.

![Figure 1. Global Macro-Roadmap: 8 Priorities](image)

The development of the Roadmap will include prioritization of actions based on an assessment of mitigation potential, whilst also taking into account cost effectiveness, broader sustainable development impacts, and political acceptability.

### B. Political leadership in the transport sector

Following “political” agreement on a “well below 2 Degree Celsius” target at COP21, there is now a need to develop detailed sectoral perspectives on how to meet this target. Since COP22, a number of countries and non-State actors have expressed the need for a global leadership platform in support of more ambitious action on transport and climate change. The transport sector is well-positioned to establish a model for sectoral leadership.

The SLoCaT Partnership through the PPMC is thus proposing the establishment of a Transport Decarbonization Alliance (TDA), which would be composed of countries and other entities that are committed to ambitious action on transport and climate change. The TDA will provide “political” leadership and a louder progressive voice for Transport in the UNFCCC process (and beyond), something which has been missing until now but which is important if the transport sector is going to scale-up its ambition level, in particular through the 2018 Facilitative Dialogue. The creation of a TDA is proposed to secure the transformation to a low carbon transport system in the second half of the 21st Century by meeting a series of ambitious milestones in 2020, 2030, and 2050 as part of a broader transition to a net-zero emission economy.
Membership in the TDA would consist, in addition to countries, also of sub-national entities with active long-term action on transport and climate change (e.g. Provinces or States) as well individual cities. In addition, the private sector is also expected to be an active part of the TDA and would be represented through a number of individual companies with well-articulated, ambitious short-, medium-, and long-term goals on transport and climate change. The TDA would be supported through knowledge partners represented either by partnerships like SLoCaT or by specific think-tanks like International Energy Agency, International Transport Forum or the World Resources Institute.

For the TDA to be effective in spurring action across sectors and global regions, it will be important to ensure a balance between different types of members as well as geographical representation. More formal criteria for additional membership are to be developed in 2017 and agreed on by those countries and organizations taking the initiative for establishment of the TDA.

C. Mitigation and adaptation synergies

In addition to decarbonization in the transport sector, sustainable transport systems must adapt to climate change to maintain reliability to enable transport’s role in economic and social development. Many sustainable transport solutions can combine increased mitigation potential and resilience as mutual benefits (e.g. during the Great East Japan Earthquake in 2011, high speed rail proved to be more resilient than conventional rail transport infrastructure).

Government agencies place high priority on adaptation planning, while also working on strategies and policies to reduce carbon pollution. Yet the nexus between adapting to a changing climate and reducing carbon pollution is rarely approached in an integrated fashion. The Center for Clean Air Policy (CCAP) sees great opportunities in focusing in on the synergies of adaptation and mitigation as demonstrated in the diagram below (Figure 2):

Figure 2: Mitigation-adaptation synergies

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Integrated A+M transport projects can attract mitigation and adaptation funds while leveraging investments in infrastructure, enhance economic development, and reducing risk and vulnerability to climate disasters. At the moment, climate finance instruments, such as the Green Climate Fund, organize financing to mitigation and adaptation separately, which does not effectively address this synergetic approach. Such an approach needs to be reflected in the architecture of the climate finance instruments.

D. MPGCA Transport Initiatives: Combined efforts of Parties and non-state actors

The Marrakesh Partnership for Global Climate Action (MP-GCA) supports voluntary collaboration between Parties and non-Party stakeholders and the Marrakech Action Proclamation also calls for combined action between Parties – non-state actors for “immediate and ambitious action and mobilization” for the Paris Agreement.

The growing space for non-State actors in the UNFCCC processes offers good opportunities for non-state actors in the transport sector to do more - not only to reduce emissions - but to raise national climate mitigation ambition, scale up action on adaptation and ensure that the transport sector get the policy support it needs to deliver.

15 transport initiatives were set up under the MP-GCA to scale up action by non-state transport actors to reduce transport greenhouse gas emissions and to ensure the resilience of transport sector in face of a changing climate. Since 2015, the Paris Process on Mobility and Climate (PPMC) has taken on the role of “convener” of these transport initiatives and a report on the status of the GCA Transport Initiatives was published in 2016. At COP22, the transport sector was recognized as a leading sector that has set a positive example to other sectors in terms of presence at the COPs.

To raise ambition and scale up action in 2017, the PPMC proposes to take the following actions:

- **Foster the setting up of new transport initiatives** on issues such as sustainable fuels, electric mobility, and urban transport planning;
- **Help the initiatives expand the geographic coverage of their work** by linking initiative with regional contacts, events, and activities;
- **Actively support/help existing initiatives through bilateral contacts** to review and scale up ambition level of actions;
- **Look to streamline / focus the initiative better** by collectively reviewing and assessing the credibility and progress of each initiative;
- **Facilitate and improve reporting on the initiatives** to provide a more comprehensive picture of the progress;
- **Improve communications and outreach** by presenting success stories and connecting initiatives with broader SLoCaT/PPMC networks.

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E. Tracking progress on global processes in the transport sector

Action to implement the Paris Agreement in the transport sector also must take place in the context of sustainable development through the provision of efficient and equitable transport infrastructure and services. The Sustainable Mobility for All (SuM4All) Initiative\(^4\) has been established with the aim to develop a possible common vision on sustainable transport and a Global Tracking Framework (GTF) to track progress toward key goals and targets set by various global agreements, including the 2030 Sustainable Development Goals (SDGs)\(^5\), the Paris Agreement on Climate Change\(^6\), the New Urban Agenda (NUA) (2016),\(^7\) the Addis Ababa Action Agenda on Financing for Development (2015),\(^8\) the Sendai Framework for Disaster Risk Reduction 2015-2030,\(^9\) the (UNCTAD) Nairobi Mandate (2016),\(^10\) and the Global Decade of Action on Road Safety\(^11\) (Reference source not found.):

![Global Processes on Sustainable Development and Climate Change Relevant to the SUM4ALL Green Goal](image)

As part of the SUM4ALL initiative, a Green Goal is being developed to call for transport infrastructure and services worldwide to be part of a net zero emission economy by 2050, and are climate-resilient, low-pollution, and low-noise. Tracking progress toward the goals of the Paris Agreement under the Green Goal is described further under the ‘global stocktake’ section below.

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II. Detailed Comments on APA agenda items 3-8:

A. Comments on “3 (a) Features of nationally determined contributions (NDCs), as specified in paragraph 26”

The sustainable transport community can offer a number of resources to facilitate transport-related features of NDCs, as described in the following sections:

1. SLoCaT Partnership NDC report

The SLoCaT Partnership has developed a report\(^\text{12}\) assessing the treatment of transport sector mitigation and adaptation strategies within NDCs. Among 160 NDCs representing 187 countries that were submitted as of August 1, 2016\(^\text{13}\), 75% explicitly identify the transport sector as a mitigation source, and more than 63% of NDCs propose transport sector specific mitigation measures. In addition, 9% of NDCs include a transport sector emission reduction target, and 12% of NDCs include assessments of country-level transport mitigation potential.

The report finds that transport related actions in the NDCs are heavily skewed towards passenger transport, which is included in 91% of NDCs identifying specific transport modes. Among these, urban transport measures are mentioned in 74% of NDCs, and heavy rail and inland waterway are also well represented, while strategies such as high-speed rail (2%), aviation (5%) and walking and cycling (14%) have received relatively less attention. Adaptation, although being mentioned in an economy-wide scope in 83% of 160 NDCs submitted to date, has generally received less attention than mitigation in NDCs. The transport sector is mentioned in general terms among climate adaptation measures in 16% of NDCs, and only 4% of countries identify transport-specific adaptation strategies.

The report concludes that on an economy-wide scale, mitigation measures proposed in NDCs are expected to fall short of an IPCC-recommended two-degree Celsius scenario (2DS). Based on existing policies and levels of ambition expressed in NDCs, it is also unlikely that the transport sector will attain a 2DS by 2030 through the targets and measures proposed. In order to achieve deeper emission cuts that would put the transport sector on track for a 2DS, transport mitigation ambition as expressed in NDCs would need to be intensified and additional transport measures, including underrepresented “avoid” and “shift” measures and efficient freight strategies, would need to be prioritized in implementation strategies.

2. SLoCaT Guidance on Defining Transport Aspects of NDCs

The SLoCaT Partnership is formulating a guidance for Defining Transport Aspects of NDCs (see Annex II). The guidance emphasizes the need for concerted transport mitigation short-term actions (by broadly scaling up transport “quick wins”), long-term actions (by developing a global macro roadmap for transport decarbonisation, along with

\(^{12}\) Nationally-Determined Contributions (NDCs) Offer Opportunities for Ambitious Action on Transport and Climate Change. http://www.ppmc-transport.org/overview_indcs/

\(^{13}\) A total of 162 NDCs were submitted, but Iraq and Kuwait were not initially included in the assessment due to a lack of SLoCaT capacity to translate from Arabic.
regional variants), and including a more balanced set of mitigation strategies consistent with the ‘Avoid-Shift-Improve’ framework. This guidance is to be developed further in the coming months and is to be incorporated into the proposed NDCP capacity building program (see following section).

3. Linking NDCs to long term emission reduction strategies

NDCs (short- to medium-term action) must be linked to Long Term Emission Reduction Strategies (as provided within the UNFCCC framework\textsuperscript{14}), as referenced in the Marrakech Action Proclamation: 

We call for urgently raising ambition and strengthening cooperation amongst ourselves to close the gap between current emissions trajectories and the pathway needed to meet the long-term temperature goals of the Paris Agreement.

To date, long-term strategies have been submitted by only six countries; thus, it is essential that more Parties (especially from the global South) submit long-term strategies, and that these strategies include detailed sustainable transport measures, which must be a central component in national mitigation strategies in order to achieve Paris Agreement targets.

B. Comments to “3. (b) Information to facilitate clarity, transparency and understanding of nationally determined contributions, as specified in paragraph 28”

1. Guidance on NDC preparation

Parties could improve the transparency of future NDCs by closely following more detailed guidance such as that included in the guidance “Designing and Preparing INDCs” developed by WRI and UNDP.\textsuperscript{15} Annex II of the WRI/UNDP document includes a list of information for INDCs (which elaborates paragraph 27 of Decision 1/CP.21) to provide further detail and clarification on each element of information in order to provide additional transparency.

2. Proposed SLoCaT capacity building program for NDC Partnership

The NDC Partnership was established on several guiding principles, which include building in-country capacity, improving coordination, and supporting multi-stakeholder engagement. The NDCP consists of 35 developing partner countries (as of 1 April 2017). 71% of these countries emphasize transport mitigation measures in their NDCs (Error! Reference source not found.), and 8% include transport adaptation measures\textsuperscript{16}:

\textsuperscript{14} http://unfccc.int/focus/long-term_strategies/items/9971.php
\textsuperscript{16} SLoCaT, Compilation of NDCs, http://www.slocat.net/docs/1503
The SLoCaT Partnership proposes to create a sustainable transport capacity building program for developing partner countries of the NDC Partnership (NDCP), with these overall objectives:

- Emphasize implementation of transport measures in first-generation NDCs, in order to accelerate pre-2020 mitigation action and set more sustainable emissions trajectories;
- Increase ambition in transport measures in second-generation NDCs, consistent with achieving Paris Agreement targets (maintaining a well-below 2 degree Celsius scenario);
- Promote synergy between transport related action in support of mitigation of, and adaptation to, climate change and the realization of the SDGs;
- Facilitate and increase institutional coordination among government ministries responsible for formulating (in particular) transport components of NDCs;
- Increase range of transport options in NDCs, using a balanced set of Avoid-Shift-Improve measures to provide more equitable transport for all users;
- Achieve better balance of passenger and freight transport measures in NDCs, to reflect proportional share of GHG emissions from each of these sub-sectors;
- Where possible, ensure synergy in transport mitigation and adaptation infrastructure measures in NDCs, to complement content of NAPs and NAPAs;
- Support objectives of UNFCCC facilitative dialogue and forthcoming global stocktake by creating a core set of ambitious and quantifiable transport NDCs, supported by communication of long-term low greenhouse gas emission development strategies.

Capacity-building programs designed to support development of NDCs can also help to foster more balanced and equitable planning decisions, as conventional planning practices tend to favor motorized transport over more resource-efficient modes.
The proposed NDC transport capacity building program would be closely linked to the emerging Transport Decarbonization Alliance (TDA) (described above), by helping to build political leadership among NDCP partner countries to secure the transformation to a low carbon global transport system by meeting a series of ambitious milestones in 2020, 2030, and 2050 as part of a broader transition to a net-zero emission economy.

C. Comments on “3. (c) Accounting for Parties’ nationally determined contributions, as specified in paragraph 31”

1. Expanded SLoCaT NDC report and tracking matrix

The SLoCaT NDC report (described in a previous section) is to be regularly updated by building out the detailed matrix of country-level which underlies the report’s analyses (and is included in summary form in the report’s annex). The matrix has the potential to be further expanded to function as a systematic tracking framework for transport component of NDCs.

D. Comments on “4. Further guidance in relation to the adaptation communication, including, inter alia, as a component of nationally determined contributions, referred to in Article 7, paragraphs 10 and 11, of the Paris Agreement”

1. COP22 Adaptation Declaration

There is a growing recognition that adaptation must become more widespread in the transport sector, and the COP22 Declaration on Accelerated Action on Adaptation in Transport17 underscores the critical need for transport systems and services to become more resilient to climate change. To date the transport sector’s action on climate change has been largely focused on mitigation, and the transport and development community launched the Declaration in response to the COP22 Moroccan Presidency’s political priority to increase attention to adaptation.

Organizations and individuals who signed the Declaration are committed to raising the profile of adaptation in discussions on climate change and transport through numerous actions, which include encouraging the adoption of technical standards to ensure that transport infrastructure is climate resilient to minimize future risk; leveraging additional climate finance to shift public and private investments towards more resource efficient and resilient transport systems; and developing appropriate monitoring and reporting procedures to improve transport adaptation efforts over time.

In just eight days, the Declaration was signed by 395 individuals and by 55 organizations, and the Declaration was presented to UNFCCC Executive Secretary Patricia Espinosa during COP2218.

2. Quick win actions on adaptation

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The SLoCaT Partnership’s mitigation-focused transport “quick win” actions (described above and in Annex 1) can be complemented with additional quick wins on adaptation: namely, retrofitting existing transport infrastructure and services (e.g. through maintenance of rural roads to reduce food loss and waste, a significant contributor to global GHG emissions) and integrating resiliency measures into new transport infrastructure and services (e.g. by engineering rail rights-of-way to withstand more frequent and extreme heat and precipitation events).

3. **Examples of transport adaptation work**

A CCAP study entitled *Climate Adaptation & Transportation: Identifying Information and Assistance Needs* was undertaken to advance efforts to adapt the planning, design, operation, and maintenance of transport infrastructure to changing patterns of climate and extreme weather. Transport planning has been typically conducted based on historical data – with the underlying assumption that existing climatic conditions will continue into the future. However, as documented in recent studies and several conferences and workshops convened within the transportation community, climate change portends to have far-reaching impacts on transportation infrastructure and associated systems. Extreme weather events, including coastal storm surges, flooding, heating and freezing, and severe rain, snow, ice, and wind events, as well as changing average conditions and seasonal weather patterns – including, sea level rise, precipitation totals, mean temperatures, evapotranspiration rates, and ecosystem changes, are projected to affect safety, cost-effectiveness, efficiency, and technical feasibility of transportation investment and asset management decisions. Transportation planners, project designers, budget managers and others will need specific guidance on how to translate climate change projections into actionable, quantitative decision parameters and criteria.

**E. Comments on “5. Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement”**

1. **Capacity building program for NDC Partnership**

The proposed SLoCaT capacity building program for NDC Partnership would emphasize the need to not only increase ambition in NDC transport measures, but also to establish understandable and measurable indicators to track the performance of these measures over time, supported by improved transport data sets. This could be achieved through an expanded tracking framework on NDC transport components (as described above) linked to transport sector GHG mitigation tools to quantify the emission reductions resulting from the transport measures implemented.

**F. Comments on “6 (a). Identification of the sources of input for the global stocktake”**

1. **Transport and climate change global status report (TCC-GSR)**

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20 [Insert reference/link]
The increased profile of transport in the global processes in recent years has led to a proliferation of work on sustainable transport, and the global transport community can be more effective in both advocacy and implementation by better documenting these efforts and tracking their impacts. Thus, SLoCaT Partnership proposes to lead production of a regular transport and climate change global status report (TCC-GSR) to offer policymakers a focal point to assess the global status of sustainable transport, and to track the implementation of policy measures in support of sustainable transport infrastructure and services with a view to applying these in their own national or subnational context.

The proposed report will take transport climate change as a primary focus, and will incorporate sustainable development co-benefits of climate mitigation and adaptation as a secondary focus. The report will reference relevant efforts from complementary sectors, and the structure, content, and process of the report will be informed by existing status reports on environment, energy efficiency and road safety.

The report will track status of a series of relevant quantitative indicators (e.g. fuel consumption, GHG emissions), and will also describe pathways toward sustainable transport in qualitative terms, based on existing programs, policies, and standards (e.g. national fuel economy policies, registered modal shift projects). The report will crucially include both national and subnational data, and both formal (from national data commissions) and quality reviewed informal data (from industry, NGOs and academia).

The TCC-GSR will add value to ongoing efforts of the global transport and climate change community in several tangible ways:

- Provide central data repository for monitoring transport and climate-relevant indices in UN agreements (e.g. Paris Agreement, SDGs, NUA, and related processes);
- Provide linkages for measuring impact of climate actions on sustainable development co-benefits (e.g. energy efficiency, road safety, air quality);
- Help build momentum on climate action established at the 21st Conference of the Parties (COP21) Paris and accelerated at COP22 Marrakech;
- Bring together information streams on transport and climate change from various sectors and subsectors that haven’t been linked previously
- Provide a one-stop shop for (sub)national policy-makers to measure current progress on transport mitigation and adaptation and increase ambition for transport in NDCs
- Go beyond basic data sharing to provide compilation of policies, instruments, and methodologies on transport and climate change and offer big-picture analysis and critical commentary to tie together work of individual organizations
- Promote the exchange of best practices and successful practices, as well as encourage the possibility of addressing challenges collectively
- Provide key inputs to develop and refine assumptions for medium- to long-term macro roadmap on transport decarbonization at global and regional levels;
- Provide channel for greater private sector participation in climate action in the transport sector by incorporating industry data alongside national statistics.

The first TCC-GSR is proposed to be released by mid-2018.

2. SuM4All Green Goal: Climate Change Adaptation and Mitigation

The SuM4All Green Goal specifically contributes towards implementation of the Paris
Agreement under the UNFCCC. Meeting a well-below 2DS as stated in the Paris Agreement will require that global GHG emissions peak and begin to decline as soon as possible and achieving zero net emissions in the second half of this century. To implement the Paris Agreement in the transport sector linkages will need to be forced between this international climate agreement and SDG 13, and its associated targets, i.e. Target 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries) and Target 13.2 (Integrate climate change measures into national policies, strategies and planning).

A Green Goal Results Framework is being developed catalyze action and to provide a tracking framework to record and report progress in the implementation of the Green Goal, which will contribute to a broader global tracking framework to be support implementation of the Paris Agreement, the 2030 Agenda as well as other global agreements.

Four targets are proposed:

1. **Climate Change Mitigation**: Reduce total transport sector GHG emissions in a manner consistent with limiting the global average temperature increase to 1.5 to 2 degrees Celsius or less above pre-industrial levels by 2050 or shortly thereafter.
2. **Climate Change Adaptation**: Climate associated vulnerability of transport infrastructure and services is addressed through preventive and adaptive actions.
3. **Minimizing Air Pollution**: Reduce premature deaths from road related air pollution by 2030 compared to 2014 by well over half.
4. **Minimizing Noise pollution**: Reduce global burden of disease from transport related environmental noise.

These targets are generally in line with the global agreements described before and indicators are proposed for each of the four target areas of the Green Goal. Indicators are a combination of derived indicators (e.g. based on total 2050 GHG emissions of 2-3 GT for transport) and aspirational process based indicators (e.g. in the case of adaptation where it is difficult to formulate detailed quantitative, derived indicators).

The Results Framework defines one principal **high-level indicator** to provide a global snapshot of progress being made in the realization of the above targets. This principal indicator is reinforced by a number of **secondary indicators** that give a breakdown of the principal indicator (e.g. by transport sub-sector), or which provide an alternative indicator (e.g. black carbon emissions in the case of climate change mitigation). Principal and secondary indicators are selected for suitability to be aggregated at the global and/or regional level.

To reflect progress in action taken to realize the different targets under the Green Goal a series of **supportive indicators** are formulated, which focus on a series of key policies, actions, or trends that give information on progress towards the realization of targets under the Green Goal.
Note that while the TCC-GSR will be used to generate a status report for Green Goal Working Group, and to support the Green Goal Results Framework (GGRF), it will go well beyond the GGRF and will have more information on current status, demand, policy, as well as implementation challenges. Thus, while the TCC-GSR is to be linked to GGRF, it will maintain a unique identity and table of contents.

G. Comments on “6 (b). Development of the modalities of the global stocktake”

1. Regional sectoral consultations

The SLoCaT Partnership proposes to conduct regular transport sectoral consultations at the regional level on a number of topics related to transport and climate change, including the global macro roadmap on transport decarbonisation, and the proposed transport NDC capacity building program. These consultations could also incorporate a discussion of modalities of the global stocktake (ideally in collaboration with NDCP), which can help to define elements of the modalities most relevant to the transport sector.
Annex I: Members of the Partnership on Sustainable, Low Carbon Transport (SLoCaT)

| 2. | African Transport Policy Program        | 48. | International Road Assessment Program            |
| 3. | Agence Française de Développement       | 49. | International Road Federation                    |
| 6. | Association in Peace with the Environment (Guatemala) | 52. | Islamic Development Bank                         |
| 8. | Bus Rapid Transit Centre of Excellence  | 54. | Michelin Challenge Bibendum                      |
| 9. | CAF-Development Bank of Latin America   | 55. | National Center for Transportation Studies, Philippines |
| 10. | Center for Clean Air Policy             | 56. | Nordic Development Fund                          |
| 11. | Centre for Green Mobility               | 57. | Polis Network                                    |
| 12. | Center for Science and Environment      | 58. | REN 21                                          |
| 14. | Center for Transportation and Logistics Studies, Gadjah Mada University | 60. | Research for Community Access Partnership         |
| 15. | Centre for Environment Planning & Technology Ahmedabad | 61. | Ricardo Energy & Environment                     |
| 17. | Clean Air Asia                          | 63. | Smarter Than Car                                 |
| 18. | Clean Air Institute                     | 64. | SNCF                                            |
| 20. | Climate Works                           | 66. | Sustainable Transport Africa                      |
| 21. | CODATU                                  | 67. | The Energy and Resources Institute               |
| 22. | Concito                                 | 68. | Transport and Environment                        |
| 23. | Despacio                                | 69. | Transport Planning and Research Institute         |
| 24. | Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) | 70. | Transport Research Laboratory                    |
| 25. | Dopplemayr                             | 71. | Uganda Road Sector Support Initiative            |
| 26. | EMBARQ, The WRI Ross Center for Sustainable Cities | 72. | UNIFE-The Association of European Rail Industry |
| 27. | European Bank for Reconstruction and Development | 73. | United Nations Centre for Regional Development |
| 28. | European Cyclists' Federation           | 74. | United Nations Development Program               |
| 29. | European Institute for Sustainable Transport | 75. | United Nations Department for Economic and Social Affairs |
| 30. | European Investment Bank                | 76. | United Nations Department for Economic and Social Affairs for Asia and the Pacific |
| 31. | FIA Foundation                         | 77. | United Nations Economic Commission for Europe    |
| 32. | First African Bicycle Information Organization | 78. | United Nations Economic Commission on Latin America and the Caribbean |
| 34. | Global Environmental Facility           | 80. | United Nations Industrial Development Organization |
| 35. | Grutter Consulting                      | 81. | University Capetown                              |
| 36. | Health Bridge                           | 82. | Victoria Transport Policy Institute              |
| 37. | Hewlett Foundation                     | 83. | Volvo Research and Education Foundations         |
| 38. | Innovation Center for Energy and Transportation | 84. | Walk 21                                         |
| 39. | Institute for Global Environmental Strategies | 85. | World Bank                                       |
| 40. | Institute for Transportation and Development Policy | 86. | World Business Council on Sustainable Development |
| 41. | Institute of Transport Studies, University of California, Davis | 87. | World Cycling Alliance                          |
| 42. | Institute for Transport Studies, University of Leeds, UK | 88. | World Health Organization                       |
| 43. | Institute of Urban Transport India      | 89. | WupPERTal Institute for Climate, Environment and Energy |
| 44. | Inter-American Development Bank         | 90. | World Wide Fund For Nature International         |
| 45. | International Association for Public Transport |     |                                                 |
| 46. | ICLEI-Local Governments for Sustainability |     |                                                 |
Annex II: Guidance on Defining Transport Aspects of NDCs

A successful set of transport measures in NDCs is likely to include the following elements:

- **Process elements**
  - Incorporate broad inputs from transport, energy, environment and urban ministries
  - Ensure buy-in on proposed measures from sub-national governments, private sector
  - Conduct citizen outreach to test acceptance/facilitate uptake of behavioral measures

- **Short-term transport measures**
  - Prioritize tested solutions to be deployed at scale (e.g. drawn from transport quick wins)
  - Adopt a subset of quick wins that reflect country-specific circumstances and means
  - Include balance of Avoid-Shift-Improve measures to create ‘diversified portfolio’

- **Medium- to long-term transport measures (e.g. drawn from global macro roadmap)**
  - Transform urban transport to create prosperous cities and healthy, inclusive lifestyles
  - Provide low-carbon solutions for rural (non-urban) transport
  - Incorporate low-carbon energy supply strategy into transport solutions
  - Avoid vehicle kilometers for commuting, shopping and accessing services
  - Improve modal and system efficiencies
  - De-fragment and shorten supply chains to manage freight transport emissions
  - Accelerate action on adaptation in the transport sector
  - Deploy economic instruments to assign a value to carbon and catalyze transformation