Transport @COP21 Paris
PRELIMINARY FINAL REPORT
15 December 2015

Opening Perspectives
Paris Agreement Creates Great Opportunities and Responsibilities for the Transport Sector

The SLoCaT Partnership came to Paris with the hope that we would have an ambitious agreement that empowers the transport sector to take more ambitious action.

In our first COP21 daily report two weeks ago we noted: “Paris is not Copenhagen.” COP15 in Copenhagen did not lack for ambition and optimism before the event started. There was anticipation in the air, which unfortunately never materialized into a concrete agreement. Our COP21 pre-optimism was based on almost all the countries in the world having come up with strategies (Intended Nationally Determined Contributions, or INDCs) before COP21 that outlined their commitment on mitigation and adaptation, including on transport and climate change.

Compared to Copenhagen, also the non-state actors were much better prepared, with the transport sector having prepared 15 transport initiatives that cut across all modes of transport and which, if implemented at scale, can reduce emissions from one in two of all trips made by 2025. Furthermore, we saw a drastic difference between Copenhagen and Paris in terms of the level of
engagement of the business sector in low carbon transport with a growing number of companies that make low carbon transport a key part of their business model.

This optimism was based on, and reflected in, SLoCaT’s preparation for COP21, which included a series of knowledge products SLoCaT prepared for the COP, as well as the advocacy campaign “We Are Transport” and the 80 Days Campaign of examples of effective climate action in the transport sector.

SLoCaT was especially pleased to see that several of the nearly 150 heads of state from around the globe that convened in Paris to open COP21 included transport in their expressions of common resolve to tackle climate change. Among statements delivered, Chinese President Xi Jinping noted low-carbon transport as a priority strategy for achieving needed reductions in GHG emissions. These references to low carbon transport by world leaders signify a significant step forward in the integration of transport in the UN process.

**Selected Transport References in Opening Statements COP21**

- “Creating jobs and sustaining growth as well as eradicating poverty in a carbon-constrained world demand a restructuring of energy and transport systems.” Seretse Khama Ian Khama, President of Botswana
- “The best economic and scientific data will serve as a basis for strategic options, which will include carbon pricing, support for energy efficiency initiatives, clean electricity and transport technology, and sustainable building and infrastructure”. Justin P. J. Trudeau, Prime Minister of Canada
- “China will, on the basis of technological and institutional innovation, adopt new policy measures to improve the industrial mix, build low-carbon energy systems, develop green building and low-carbon transportation, and build a nation-wide carbon emission trading market so as to foster a new pattern of modernization featuring harmony between man and nature.” Xi Jinping President of the People’s Republic of China
- “My government has announced projects aimed at speeding up the decarbonizing of transport, fisheries and agriculture – in cooperation with the industries concerned, which we think is crucial for success.” Sigmundur David Gunnlaugsson, Prime Minister of Iceland
- “My office has launched an initiative, to reduce global dependence on crude oil, especially in transportation.” Benjamin Netanyahu, Prime Minister of Israel
- “To illustrate, there are technologies to produce, store and transport hydrogen towards realizing CO2-free societies, and a next-generation battery to enable an electric car to run five times longer than the current level.” Shinzo Abe, Prime Minister of Japan
- “We have taken the first steps in switching Jordan’s public sector fleet to eco-friendly electrical vehicles.” Abdullah II Ibn Al Hussein, The King of Jordan
- “Some of the sector-wide voluntary domestic measures and actions to address climate change include low carbon and efficient transportation systems.” Uhuru Kenyatta, President of Kenya
- “Korea’s best known island, Jeju will transition into a carbon free island by replacing its entire fleet of cars with electric vehicles and meeting 100% of its energy needs through renewable energy sources.” Park Geun-hye, President, Republic of Korea
- “In the next few years, Panama will culminate the building and integrate the urban transport system, which will have three metro lines, a bus network to provide public transport system which is modern, efficient and environmental friendly.” Juan Carlos Varela, President of Panama
- “In Paraguay we are renewing our public transport fleet, investing new technologies that are multi-modal and efficient for reducing the use of fossil fuels.” Horacio Manuel Cartes, President of Paraguay
- “Several mitigation initiatives including promotion of affordable renewable technologies, measures towards energy efficiency, implementation of a mass transport system, and expansion of hydroelectrical potential are already part of our development strategies.” Muhammad Nawaz Sharif, Prime Minister of Pakistan
- “We are working on all fronts to achieve this target by using less fossil fuels and more renewable energy, such as promoting the use of hybrid and electric cars, switching from road to rail transport.” Prayut Chan-O-Cha, Prime Minister of Thailand

Source: [https://unfccc.int/meetings/paris_nov_2015/items/9331.php](https://unfccc.int/meetings/paris_nov_2015/items/9331.php)
On the topic of leadership, SLoCaT would like to join the long line of countries and organizations that have paid tribute to the masterful leadership of Laurent Fabius the COP21 President (which earned him the central place in the masthead of our final report).

In terms of empowering opportunities for the transport sector, SLoCaT would like to call attention to the following references of the Paris Agreement:

- **Increased ambition**: Moving to a target of well below the two-degree Celsius scenario (2DS) and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels is a strong call to action for the transport sector to accelerate the decarbonization of the transport sector. This is not an easy task but having such an explicit, ambitious target should help the transport sector to shift from an incremental approach in mitigating climate change to a truly transformational approach;

- **Adaptation**: The draft text places added emphasis on adaptation, amongst others by including a global goal on adaptation. This motivates the transport sector to accelerate action on adaptation and resilience, an area that hitherto has not received the same attention in the transport sector as mitigation of climate change;

- **Technology**: Intensified action on mitigation and adaptation requires, apart from changes in planning and modal shift, also more action on technology. The 80 Days Campaign on climate action in the transport sector implemented by SLoCaT and the Government of the Netherlands makes its clear that the transport sector is well placed to make increased contributions to the technology track of the UNFCCC process;

- **Capacity building**: Much of SLoCaT’s work is focused on the developing world, where motorization is growing the fastest and where the need for action is greatest for both mitigation and adaptation. The establishment of the Paris Committee on Capacity Building, as well its proposed work program, offer the transport sector great opportunities to help build much needed capacity among governments, as well as in the business sector, in support of scaled up action on mitigation and climate change;

- **Pre-2020 Action (ADP Workstream 2)**: The continued emphasis on maximizing action on mitigation and adaptation before 2020 when the Paris agreement is scheduled to come into force is key to the transport sector. Delaying action on transport until the implementation the Paris Agreement in 2020 would be counterproductive, as much of the BAU growth in the transport sector is linked to ongoing motorization and associated infrastructure development, which can lock-in unsustainable emission patterns;

- **Non-Party stakeholders**: It is also crucial for the transport sector that the Paris Agreement specifically mentions the contribution of non-Party stakeholders both in context of pre-2020 action as well as more generally in support of the implementation of the new agreement. As in other sectors, non-Party stakeholders including the business sector, cities and civil society have a key role to play in scaling up and mainstreaming of low carbon transport, not only for passenger transport, but importantly also for freight transport. It is encouraging that the UNFCCC process is being opened up further to non-Party stakeholders;

- **Continuation of LPAA Process**: The Lima-Paris Action Agenda (LPAA) has been key in mobilizing the transport sector in support of action on transport and climate change. This resulted in 15 initiatives that were presented during COP21. Together with the December 3 Transport Focus event, it has contributed to greater visibility of transport in the UNFCCC process. It is good news therefore for the transport sector that the Paris Agreement suggests
a continuation of the process with high-level events as well as having two High-Level Champions to carry forth this momentum.

Overall, SLoCaT, like many others is very pleased with the outcomes of COP21. The transport sector, like other sectors, is presented with an ambitious but challenging agenda. In the detailed review of the Paris Agreement and associated COP21 decision, we outline detailed comments from the perspective of the transport sector. We note that the outcome documents of COP21 are to a large extent sector neutral, with very few sector specific references in the document. We hope that this will help to create a level playing field for all sectors in the development of detailed Means of Implementation for the Paris Agreement in the next few years. Our detailed review indicates that much work needs to be done on the Means of Implementation to ensure that the transport sector will be able to help realize the ambitions agreed upon in Paris.

KEY FOCUS AREAS ON TRANSPORT AND CLIMATE CHANGE

Throughout COP21, the SLoCaT Partnership reported on progress on the negotiations in Paris based on six key messages that reflect SLoCaT’s COP21 We Are Transport campaign:

- **Decarbonisation** - Low carbon transport means halving our emissions from transport before 2050;
- **Adaptation** - 80% of the world’s population lives on coastal plains or near rivers, adapting our transport networks to a new climate is a big issue;
- **Urgency and Timeliness** - Now is the time for taking action on transport;
- **Dynamism and Innovation** - Transport is one of the most innovative and dynamic sectors in developing climate solutions;
- **Connectivity and Accessibility** - Sustainable and low carbon transport provides access to all without regard to social status, colour or creed;
- **Finance** - There are financing solutions for shifting to low carbon transport pathways.

The campaign brings together all transport modes and sub-sectors under the common purpose of combating climate change. This final report assesses the discussions at COP21 and its outcomes through the lens of these six key messages. At the outset, we analyze first in a detailed manner Decarbonization, Adaptation, Dynamism and Innovation, and Finance examining how the COP21 outcome documents reflect these themes as well as what general comments have been made by civil society and the business sector. Following this we consider the COP21 outcomes in these areas from a transport sector perspective. The review of the COP21 concludes by looking at how the two cross cutting messages on Urgency and Timeliness, and Connectivity and Accessibility are reflected in the COP21 outcomes from a transport perspective.

In our review of COP21 we also comment on a number of topics to watch and which in the view of SLoCaT, can influence the next steps in the implementation of the Paris Agreement. These include: (a) the role of non-Party stakeholders; (b) short-lived climate pollutants; (c) electric-mobility; and (d) carbon pricing.
This is followed by some brief conclusions and an Annex with an extensive overview of recommended actions in the COP21 Decision that provide opportunities for the transport sector to contribute towards the operationalization of the Paris Agreement.

**Decarbonization of the Transport Sector**

Decarbonization is a central goal of the Paris agreement, and it is essential that decarbonization efforts in the transport sector go beyond short-term actions, but instead embody long-term systemic shifts.

**How we see the COP21 Outcome Document**

On the topic of decarbonization, the Paris outcome document focuses largely on collective long-term qualitative goals (e.g. carbon neutrality) and following intensive discussions COP21 settled for “holding the increase in the global average temperature to well below 2 degrees C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degrees C above pre-industrial levels” recognizing that this would significantly reduce the risks and impact of climate change. This language, while ambiguous, will be very useful in determining direction, setting broad ambition levels, and establishing a general recognition of the necessity of increased economy-wide mitigation actions, including in the transport sector, in support of accelerated action on climate change.

Regarding collective and country-level efforts toward decarbonization, the COP21 outcome document “notes with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 °C scenarios. Instead they note they lead to a projected level of 55 gigatonnes in 2030, and also that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 °C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5 °C above pre-industrial levels.”

For INDCs, the COP21 decision proposes a timeframe up to 2025 (or 2030) to communicate by 2020 a new INDC (or substitute) and to do so every five years. This is an improvement over a previously included option of 5 or 10 years, to ensure that mitigation ambition is optimized. In terms of compliance and transparency, the draft decision requires the submissions of a synthesis report to the UNFCCC Secretariat at least 9-12 months in advance of the review with a view to facilitating the clarity and transparency of the INDC. This is important language to ensure that good intentions are backed by good implementation practices.

Regarding pre-2020 ambition, the draft decision “emphasiz[es] that enhanced pre-2020 ambition can lay a solid foundation for enhanced post-2020 ambition,” and also “emphasiz[es] the enduring benefits of ambitious and early action, including major reductions in the cost of future mitigation and adaptation efforts.” The decision further “recogniz[es] the urgent need to enhance the provision of finance, technology and capacity-building support by developed country Parties, in a predictable manner, to enable enhanced pre-2020 action by developing country Parties “noting ongoing issues of differentiation in the implementation of planned mitigation actions. In addition, the draft decision “invites the IPCC to provide a special report in 2018 on the impacts of global warming of 1.5 °C… and related global greenhouse gas emission pathways,” crucially acknowledging the need to reassess impacts and potential actions in the pre-2020 period.

To address the widespread concerns on the absence of a detailed Measuring, Reporting and Verification (MRV) mechanism the Paris Agreement specifies that “[I]n order to build mutual trust and confidence and to promote effective implementation, an enhanced transparency framework
for action and support, with built-in flexibility which takes into account Parties’ different capacities and builds upon collective experience is hereby established.” Details of this transparency framework will be elaborated in the coming years and it is expected that discussions on the detailed interpretation of Article 13 of the Paris Agreement will be dominating future COPs.

**How commentators view progress on this issue**

Without doubt the biggest success of COP21 has been the consensus built on scaling up levels of ambition from an ever-expanding set of Parties. In recent days, a growing number of countries have expressed support for a 1.5DS through a new “high ambition coalition” initially consisting of 79 African, Caribbean and Pacific countries, the US and all of EU member states, thus marking an important expansion of this position among developed as well as developing countries. This is a strong result, as recent assessments by a range of international bodies have concluded the current INDCs will not be sufficient to achieve a 2DS. This trend sends a clear message to all sectors that there is need for disruptive change in the area of decarbonization, as incremental approaches will not be sufficient to make needed strides in this direction.

This agreement on increased ambition level is widely welcomed by non-Party stakeholders and has helped to build the wide support from stakeholders across the board.

The Climate Action Network, bringing together a wide range of civil society organizations, actively advocated for a 1.5DS to protect not only the less affluent citizens of LDCs and SIDS, but also the more well-heeled populations of developing countries metropolises such as New York, Naples, and Osaka. ECO has long made the case to NGOs and negotiators alike not to settle for a 2DS, and at COP21 their efforts paid off. To realize the 1.5DS, daily ECO newsletters noted the imperative of phasing out all fossil fuel emissions by 2050, and expressed reservations on the proposed use of generating and achieving offset credits to achieve national emission reductions.

The COP21 business community, through its daily The Bottom Line newsletter, called for the following four points in a Paris agreement to send needed signals to the private sector: addressing all Kyoto greenhouse gases and short-lived climate pollutants; combining INDCs (with strong and regular review cycles) and pre-2020 ambition; defining an endpoint “well before the end of this century”; and targeting and achieving a 2DS, and preferably a 1.5DS. The business sector has welcomed the ambitious long-term goal contained in the Paris Agreement and in this respect, noted “what’s good for business is good for us all.”

As the negotiations have concluded, it is encouraging to see that NGOs and the business community are converging on key points, which sends a ray of hope that we will be able to build strong broad-based alliances in support of the implementation Paris Agreement.

**SLoCaT’s assessment of implications for sustainable, low-carbon transport**

In 2012 transport was the largest energy consuming sector in 40% of countries worldwide, and in most of the remaining countries, transport is the second largest energy consuming sector. In 2012, nearly two thirds of countries had a transport sector share of total emissions from fuel combustion greater than the global average of 23%, and the share of countries exceeding the global average is increasing over time. This illustrates the key role that the transport sector will need to play in the implementation of the Paris Agreement. Much of the discussions on action on climate change are still dominated by energy sector related discussions. SLoCaT feels that this has to change and that following the adoption of the Paris Agreement there is need to ensure that all major sectors, including the transport sector, are more fully included in scenario and policy related discussions.
Historic transport sector emissions growth in Annex I countries averaged 0.5% from 1990 to 2012, and non-Annex I countries averaged 4.8%, and it is expected that by 2016 or 2017, transport emissions from non-Annex I countries will be larger than those from Annex I countries. Crucially, growth in transport emissions can be decoupled to some extent from economic growth. Annex I Parties in particular have limited transport emissions growth to well below GDP growth rates, and even non-Annex I Parties have also kept transport growth below GDP growth over this 12-year period (albeit by a much narrower margin). Such decoupling must be achieved in developing as well as developed countries to make progress toward collective reductions to meet a 1.5/2DS.

INDCs represent a unique opportunity to increase bold mitigation and adaptation measures in transport and other sectors. Maximizing national mitigation actions will require optimizing contributions from transport in existing INDCs through mechanisms to increase mitigation ambition in successive evaluation periods.

Notably, the COP21 negotiating process has shifted away from prioritizing technological measures towards more comprehensive approaches and systemic changes. This reflects a general trend in country-level INDCs, as illustrated in the following section for transport-specific measures. This is also confirmed in a recent UNFCCC document for policy makers that incorporates for the first time a mitigation approach for the transport sector that includes Avoid and Shift measures (in addition to Improve measures), and the UNFCCC’s Global Environment Facility has moved squarely in the direction of funding Avoid and Shift measures among its transport sector mitigation projects, as well as increasing its attention toward projects intended to increase the resilience of transport assets. Having such a convergence of policy approaches across institutions bodes well for coordinated action on the mitigation of climate change in the transport sector.

SLoCaT has also been encouraged by CEO Climate Leadership Declaration for Automotive issued on December 10th, 2015. The CEOs of the global light and heavy duty automotive industry made an important commitment to sustainable mobility with a public declaration to decarbonize automotive transport. The CEOs pledged to seek safe, responsible and sustainable ways to meet the growing demands around the world. They committed to catalyze combined action and initiatives from the automotive industry sector, policymakers and stakeholders to deliver solutions and innovations in products, services, operations and policies that maximize the benefits of mobility while mitigating the impact to the environment. Actions under the commitment include prioritizing R&D efforts to increase the fuel efficiency of the internal combustion engine, advocating for policies that place a value on GHG reduction, and harnessing the potential of new technologies, digitalization and the sharing economy to provide new and flexible opportunities for transport.

Further support for action to reduce GHG from private cars was also expressed during COP21 by FIA, which presented its report on “Global Reduction in CO₂ emissions from cars: a consumer’s perspective” with policy recommendations for decision makers.

Developing countries have demonstrated considerable ambition for transport within their INDCs, as evidenced by submissions from Bangladesh, Gabon, Morocco and others. INDCs are at present largely skewed toward passenger rather than freight emissions, which are growing more quickly, and tend to rely heavily on Improve strategies. Thus, INDCs could incorporate a more balanced share of Avoid and Shift strategies to increase mitigation potential.

As economy-wide ambition levels increase, it is clear that transport must do its share to make strides toward an eventual 1.5- or 2-degree target. As transport is among the fastest growing sectors for carbon emissions (in percentage terms), it is essential that the sector make a
proportional contribution to mitigation action (acknowledging that mitigation trajectories in other sectors are also evolving).

A recent SLoCaT study explores the **2030 mitigation potential of the transport sector** in comparing BAU and LCS in the context of a 2DS, (until COP21 the commonly-accepted reference scenario). The global transport CO2 emissions are projected to grow from 6.7 Gt in 2010 to 9.1 Gt in 2030 and 11.8 Gt in 2050 under business-as-usual scenario (BAU). In order to reach 2DS scenario, a deviation of about **35% by 2030** and 66% by 2050 from BAU scenario is needed from the transport sector.

With broader calls at COP21 for a more stringent 1.5DS, SLoCaT on the basis of preliminary analysis believes that this proposed reduction in the transport sector would need to be further increased to **51% by 2030** and 81% by 2050 from BAU. To meet a 1.5DS, the transport sector would roughly need to reach 1990 levels by 2030, as shown in the following graph.

![Graph showing Global Transport CO2 (Gt) from 1990 to 2050](image)

While SLoCaT absolutely agrees in ethical terms with the need to set the average temperature threshold as low as possible to protect the world’s most vulnerable population, we also acknowledge that moving the dial from 2DC to 1.5C would involve even more disruptive changes in the transport sector. This would require even greater political commitments across the world to move away from traditional internal combustion engine-oriented models of transport development, and to more fully embrace a more balanced set of Avoid, Shift and Improve strategies in local, national, and regional transport planning efforts. Making such leaps would require moving quickly from project-based to more programmatic approaches; in essence, to fire on all cylinders, as well as no cylinders, as electric mobility is scaled up for personal cars, public transport and two-wheelers.

**Non-state actors** have gained significant stature in the past year in the UNFCCC process. At COP20, the potential role of non-state actors was tenuous in the Lima outcome document, though the emergence of the NAZCA portal helped to establish a greater foothold for non-state actors in the framework. The transport sector and the PPMC benefitted greatly from the establishment of the active role of the LPAA as was showcased by 15 transport initiatives in the December 3 Transport Focus. Direct contributions to mitigation from the transport sector have come in the form of LPAA-linked transport initiatives, which take different approaches to quantifying mitigation ambition, including, but not limited to, GFEI (100 countries for 50% fuel use
reduction by 2050), UIC (quantified reductions in energy use and emissions for freight and passenger rail), and UITP (double the market share of public transport by 2025), among others.

Though these initiatives mark crucial efforts of non-state actors to decarbonize in both pre-, and post-2020 period, it is difficult to assess whether levels of ambition are sufficient to reach a 1.5/2DS, and thus forthcoming initiatives of this type should be calibrated to long-term targets.

To fully capitalize on the mitigation potential of the transport sector, SLoCaT believes that there is a need to frame the conversation in a different manner. We need to stop talking about mere ‘mitigation’ (which implies incremental and superficial activity) and start talking about decarbonization (which suggests more disruptive and sustained impact). We must move beyond demonstration projects and move toward more systemic changes to meet the rising ambition of negotiators in contemplating a 2DS or 1.5DS in a forthcoming Paris agreement.

Due in large part to the leadership of LPAA in the past 12 months, at COP21 there has been a clear recognition from national governments of the essential roles of non-state actors in achieving and even guiding mitigation efforts in various sectors. Chapter V of the COP21 Decision “Welcomes the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities”. Numerous references to the role of non-Party stakeholders can also be found in other parts of the COP21 Decision (see Annex to this report for a systematic overview).

This opens the door for the transport sector to contribute more directly to the development of the detailed Means of Implementation of the Paris Agreement.

**COP21 Issue to Watch #1: Non-Party Stakeholders/ Non-State Actors**

COP21 has brought an important recognition from UNFCCC leadership and Parties that states can't tackle climate change alone, and that will increasingly draw on the expertise and resources of non-party stakeholders, including cities, civil society, and the business sector, as noted in Pp8 of the preamble to the December 10 draft decision text: “Agreeing to uphold and promote regional and international cooperation in order to mobilize stronger and more ambitious climate action by all Parties and non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other subnational authorities, local communities and indigenous peoples.”

Cities are dominant in the news and there is a growing emphasis on cities organizing around climate change issues, notably through the Paris Declaration on sub-national climate action, which was launched during COP21. Cities are specifically mentioned in the agreement, which has brought together commitments from more than 7000 sub-national governments, and with 2,255 cities and 150 regions registered among NAZCA climate commitments platform. Cities are also the focus of the upcoming Habitat III Conference in October 2016, which will help to set the agenda for urban development over the next 15 years. The Paris Declaration could provide a welcome boost to raise the profile of transport in the Habitat III process, in which it does not feature prominently to date, by driving additional urban transport partnerships such as the C40 Cities Bus Declaration.

The LPAA has given another boost to non-state actors, and transport is featured in 15 initiatives to increase mitigation and adaptation actions across a broad range of subsectors, including urban transport, rail transport, cycling, electric mobility, aviation, and shipping. Civil society is also increasingly involved in sustainable development following the FfD and SDG processes this year, and transport can be further integrated into this mix as well. Finally, the business sector is building momentum in the area of transport and climate change by raising mitigation ambition in calling for a 1.5DS, driving innovation and dynamism for transport in areas such as electric mobility, and leading strategic partnerships such as the Paris Process on Mobility and Climate.
Adaptation and Climate Resilience in the Transport Sector

Recognizing the growing importance of adaptation, the Parties of the UNFCCC over the years have established a number of instruments, bodies, work plans and support mechanisms on adaptation under the Convention. With rising temperatures and more intense climate impacts, the urgency of adaptation has become a priority for Parties to the UNFCCC, which is reflected in the strong component on adaptation included in the Paris Agreement and associated COP21 Decision.

How we see the draft Paris Outcome document

Article 7 of the Paris Agreement states: “Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2”. The Paris Agreement further calls on Parties to “[i]ncreas[e] the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production”.

The Paris Agreement establishes that all countries should present National Adaptation Plans and that INDCs should contain nationally determined contributions on adaptation. The COP21 decision underscores the need to enhance action on this topic through a range of detailed provisions.

The Paris Agreement recognizes the adaptation efforts of developing countries as well as the need for adaptation regardless of the level of mitigation reached, as a greater level of mitigation can reduce the need for additional adaptation efforts. This is particularly true for sustainable transport solutions that can combine increases in mitigation potential with resilience as a mutual benefit.

The COP21 outcome documents call for countries to engage in the implementation of adaptation planning processes and actions, including development or enhancement of relevant plans, policies and contributions which includes adaptation actions, national adaptation plans, nationally determine prioritized actions. Each party shall submit an adaptation communication, which may include priorities, support needs, plans and actions.

The importance of adaptation in COP21 was also illustrated by a series of concurrent financial announcements. The Adaptation Fund received USD 75 million from Germany, Italy, Sweden and Walloon Region of Belgium. France also announced that by 2020 it will triple its annual adaptation finance to EUR 1 billion. Ireland has ensured EUR 175 million over the period of 2016-2020, mainly for adaptation. Other countries like the United Kingdom will increase its climate finance to GBP 5.8 billion between 2016-202, aiming to spend half on adaptation. The ADB, as part of efforts by the multilateral developments banks, will double its annual climate finance to USD 6 billion by 2020, where USD 2 billion will be focused on adaptation.

The COP21 outcome documents also request parties to strengthen cooperation on adaptation by establishing regional centers and networks, reporting progress on their implementation of their national adaptation plans every two years and encouraging them to work closely with non-party stakeholders to catalyze efforts to strengthen adaptation actions.

SBI and SBSTA are expected to launch a technical examination process on adaptation in the period 2016-2020 that would help increase understanding and implementation of adaptation actions.
How commentators view progress in this area

The Climate Action Network (CAN), in its ECO NGO newsletter, calls for a real mechanism to increase ambition on all fronts—including adaptation and means of implementation—by 2018. This can create the basis for a transparent Measuring, Reporting and Verification (MRV) system, as without enhanced action on adaptation before 2020, the door to a 1.5°C pathway would close. CAN concludes that Parties can enhance resilience through the Paris Agreement with strong provisions on adaptation.

According to the Third World Network, South Africa, on behalf of the G77/China, recommended scaling up climate finance from the 2020 base level of USD100 billion with a revision upwards every 5 years and equal allocation between mitigation and adaptation. Likewise, the Third World Network advocates that adaptation maintains equal priority with mitigation.

ECO also mentioned that the Agreement must ensure that no one is left behind, making an Adaptation goal necessary to the Paris agreement to keep people and the planet safe in the view of rising impacts. According to ECO, the agreement must increase adaptation finance, with a balance between mitigation and adaptation, aiming to reach 50/50 balances by 2020 under the US 100 billion pledge.

And last but not least, civil society asked to ensure that resilience can be achieved in the Paris Agreement through strong provisions on adaptation.

SLoCaT's assessment of implications for sustainable, low-carbon transport

Adaptation in the transport sector is necessary for both developed and developing countries, as transport systems worldwide are vulnerable to the increasing impacts of extreme weather. Trillions of US dollars are invested annually in the development of transport infrastructure, and the impact of weather events has considerable cost due to maintenance, repair and construction disruption. For example, the impacts of flooding due to rising seas in developed countries will have climate impacts on coastal roads, railways, transit systems, tunnels and runways, and intensified flooding and landslides will increase the risk of disruption on road transport, particularly for public transport in the developing world.

Yet only 13% of the INDCs submitted prioritize transport related adaptation measures and only 4% of the INDCs submitted identify transport-specific adaptation strategies. Similarly, the share of international climate finance for transport allocated specifically to adaptation is generally only about 20-25% of the share allocated to mitigation. Although work on adaptation has been in the Convention agenda since the second COP, little has been done regarding transport.

SLoCaT finds it encouraging that building blocks for greater action on adaptation in the transport sector are being developed, with substantive work on the development of a knowledge base, and initial steps are being taken to increase the profile of climate adaptation in national climate policies and in the transport portfolios of international financing institutions (IFIs) and climate finance instruments, including the World Bank (WB), the Nordic Development Fund (NDF), and the Global Environmental Facility (GEF). The MDB community launched the Paris Commitments on Climate Finance, which recognizes the importance of resilience and prioritizes greater action on adaptation, including in the transport sector.

The Nordic Development Fund (NDF) is also offering practical lessons from adaptation efforts in the road transport sector. NDF is currently supporting eight transport adaptation projects in Asia, Africa, and Latin America, allocating EUR 3-5 million to each project as a grant, which in turn is linked to USD 160 million of lending through partnering with MDBs. NDF has concluded that an
An integrated approach is more fruitful than a standalone one; that technical assistance offers more sustained support than financial assistance; and that developing the capacity of local authorities is crucial to mainstreaming adaptation features in transport infrastructure projects.

Furthermore, the GEF is increasing its support for adaptation in the transport sector, within a USD 1.3 billion allocation for adaptation, which is intended to leverage other funds. The GEF supports the process of developing National Adaptation Plans (NAPs) as well as strengthening their climate information services -- including 36 LDCs, having a pipeline of more than 80 projects that are helping more than 60 countries reduce near-term losses related to climate impacts. In addition, the GEF is currently funding two implementation projects related to transport and adaptation, one on enhancing resilience of the port infrastructure of Morocco and another on climate proofing development in the Pacific.

Importantly, climate adaptation initiatives for transport can simultaneously contribute substantially to achieving the recently adopted sustainable development goals (SDGs) by working on the target identified in the goals related to health, energy, infrastructure and urban issues, as consistent with long-term strategies of inclusive growth in developing countries.

In response to the call for greater action on adaptation in the COP 21 outcome documents, especially with respect to knowledge management and capacity building, SLoCaT made use of COP21 to initiate discussions on a proposed Program on Accelerated Action on Adaptation in Countries, Cities and Companies (A3C3). This program may contribute towards recommended action on adaptation in the COP21 Decision. A3C3 would function as a knowledge hub for capacity building, promoted policy dialogue, and gather the necessary tools that can be useful to the countries.

COP21 Issue to Watch #2: Short-lived climate pollutants

Short-lived climate pollutants (SLCPs) create significant short-term warming impacts, which also offer an opportunity for significant reductions and co-benefits if properly addressed. Black carbon, associated with the use of diesel vehicles is a major SLCP.

While SLCPs are not explicitly mentioned in the Paris Agreement, they are implicitly included in areas such as the call for heightened pre-2020 ambition and the greater call for non-Party stakeholder involvement in the Technical Examination Process. SLCPs were also not highlighted in the context of the negotiations, but featured prominently in other discussions surrounding the COP. It was notable that the Business Community specifically included black carbon, one of the most important SLCPs in their list of requested COP21 outcomes.

Among LPAA initiatives, SLCPs are specifically called out in the global Green Freight Action Plan, under which committed governments and companies will expand and harmonize green freight programs that will generate reductions in black carbon and CO2 emissions from multimodal goods movement, thus protecting public health and reducing near term climate change.

SLCPs are mentioned in some of the INDCs as well, including submissions from Central Africa Republic, Chile, and Mauritius. For example, under its action plan, Morocco has proposed significant reduction of fossil fuel subsidies and increasing the use of natural gas. Morocco has also committed to develop a national plan to combat short-lived climate pollutants (SLCPs), with support from the Climate and Clean Air Coalition. With the transport sector being a significant contributor to black carbon emissions (about 19% globally), Morocco may propose additional actions on reducing diesel consumption in transport sector. Other Parties could follow suit to pluck low-hanging fruit to ramp up mitigation actions and to achieve political wins by addressing air quality issues in quickly growing urban areas.
Technological Dynamism and Innovation for Transport

The Paris discussions were framed by a set of key messages prepared for the COP on technology.

**How we see the draft outcome document**

The Paris Agreement and COP21 Decision follow largely the key messages prepared prior to the COP. They underscore the importance of technology development and transfer by amongst others an agreement to strengthen the Technology Needs Assessment (TNA) process. This would be aided by a Technology Framework, which amongst others would (a) facilitate the undertaking and updating of TNAs in developing country Parties; (b) facilitate various options for enabling developing countries’ access to technologies; (c) facilitate the [undertaking of technology assessments][conducting of regular assessments [on][of] technologies that are ready for transfer]; and (d) establish a list of ready-to-transfer technologies.

**COP21 Issue to Watch #3: Electro-mobility**

Electric mobility seems to have reached critical mass at COP21, with the dovetailing of many efforts adding up to the potential for significant emissions reductions in this area. COP21 saw the release of the Paris Declaration on Electro-Mobility and Climate Change & Call to Action, which requires 20% all transport activity in 2030 to be electric mobility. Also during COP21, AVERE (the European Association for Battery, Fuel Cell and Hybrid Electric Vehicles) released an industry pledge to match political commitments made, at Paris COP21 or other occasions, for ambitious growth in electro-mobility and the further roll out of electric vehicles, in the process calling on governments to define a long term strategy to deployment of electric vehicles and infrastructure backed by adequate incentives to address consumer’s needs and concerns.

During the LPAA Transport Focus event on December 3rd, Ségolène Royal, French Minister of Ecology, Sustainable Development and Energy, announced that the French government will encourage companies to build an electric car priced under 7,000 euros to help reduce urban transport emissions – COP21’s answer to the ‘deux chevaux,’ noting that this will not solve the congestion problem but that the congestion will at least be cleaner! Overall, shifting transport from a business-as-usual pathway is a green growth opportunity in which many jobs can be created.

In addition side event, including, a high level event on zero emission vehicles in the Netherlands Pavilion attracted large crowds. A breakout session on electrifying road transport during PPMC’s Transport Day furthered the dialogue on e-mobility solutions with contributions from IEA, ICCT, and TRL, among others.

Several of the world leaders addressing COP21 in its opening session gave examples of their actions on electric mobility. A significant number of INDCs include electric mobility among their planned transport sector measures (accounting for more than 20% of INDCs that propose specific transport measures), which include countries such as Bhutan, Côte d’Ivoire, and Jordan. In addition, PPMC’s 80 Days Campaign highlights several electric mobility actions among its TCAs, highlighting not just private cars but also public transport vehicles and two-wheelers, in addition to actions in the freight and shipping sub-sectors not previous associated with electric mobility.

All in all, however, technology took a back-seat in COP21 and was not featured extensively, overshadowed by other more pressing issues, and though there is consensus on the need for technology, but the delivery via a Technology Framework and financing mechanisms needed to be significantly strengthened. Finance for the Climate Technology Centre and Network (CTCN) has not been forthcoming in the required manner and this has hampered the development of the mechanism. Many countries have gotten caught in the vortex of negative exchanges around how intellectual property is treated, though in other non-transport related sectors such as agriculture, this has had greater significance.

www.ppmc-cop21.org
The approach to technology remains country-led, enabled by technical needs assessment (TNAs) that will be continued and strengthened. Transport featured highly in the first round of TNAs, but less so recently, with the CTCN receiving few requests for transport project support. The language on technology in the COP21 documents is in places still largely project driven, although the Agreement does include a call for improving policy frameworks to remove present barriers to encourage and accelerate the transfer of technology.

**How commentators view progress in this area**

Questions can be asked on the guiding role of the UNFCCC in Technology Development and Transfer. It has been observed that there is progress on climate change related technology and innovation outside the UNFCCC process, especially so in the transport sector. 20 of the largest world economies launched an *ambitious programme* during COP21 entitled ‘Mission Innovation’ with the goal to fast track the take up of clean energy technologies to more than double investments in R&D on clean energy. This is in line with the ambitions of some development banks such as the African Development Bank that has “**Powering Africa**” as one of its development pillars.

According to the [ECO newsletter](https://www.eco.org/policy-newsletter), civil society has expressed concerns that climate technologies need to be of the highest social and environmental integrity. This will encourage far more countries to ratify the Paris Agreement, which can thus enter into force and facilitate early action, which is essential to avoid dangerous warming.

According to the [Third World Network](https://www.twn.my/ss21/energy/18894.html) (TWN), developing countries will not be able to switch to a low-carbon pathway without adequate financial support and technology transfer. South Africa on behalf of the G77/China emphasized that developing countries can only undertake ambitious mitigation and adaptation actions with the provision of finance and the transfer of technology. TWN further notes that for a good and fair agreement, developed countries must commit to provide financial resources and support for technology transfer and development instead of merely embracing voluntary and unaccountable “partnerships”.

The [Bottom Line](https://www.bottomline-news.com/) newsletter notes that the private sector has already showed the willingness to help combat climate change, with technology innovation being one of the means. A clear outcome of the Paris COP is an acknowledgement of the need for the private sector to be involved and for a greater attention to collaborative research and development. Some countries, such as the US and Japan, find this uncomfortable and are not encouraging a collaborative approach, as they feel this might threaten their leadership (perceived or real) in some sector domains. This is nonetheless of some importance in terms of how intellectual property rights can be treated in the transfer of technology.

**SLoCaT’s assessment of implications for sustainable, low-carbon transport**

Changes in transport towards a more climate friendly paradigm will in part be delivered through new technological innovations in relation to infrastructure, vehicles, and fuel. None of these technological innovations are likely to come through a country-based approach as suggested by the UNFCCC process. Accelerated development of technological innovations will require a greater involvement of the business sector. It is striking that while energy related and other industries have been associated more closely with the UNFCCC process and recent COPs, the automotive industry has been largely absent from the discussion so far. It is telling that the [CEO Climate Leadership Declaration for Automotive](https://www.ceo-climateleadership.net/) was released only on December 10th,
largely in response to the discussions in COP21, rather than in advance of COP21 to inspire discussions as was done by other industrial sectors.

There is highest potential in the ICT sector and using it in increasingly ‘smart’ ways can be of great value to reducing emissions in the transport sector. This latter element cannot be emphasized strongly enough as existing capacity in the passenger and freight transport sector can be maximized with the use of smart phones and digital connectivity without the need to build new infrastructure. New technologies in adaptation will both increase the resilience of the transport sector and are especially appropriate for the developing world, with a focus more on adapting infrastructure.

Another example from transport is the treatment of diagnostics and maintenance. As vehicles become more electronically complex their maintenance requires computer systems for the mechanics to identify any problems, and this process is linked to the proprietary software of that vehicle brand which may exclude some of the poorest countries from using more environmentally clean vehicles and fuels.

The SLoCaT – Netherlands government PPMC 80 days campaign has highlighted a variety of new and exciting technology developments across the transport sector – including examples on 3D printing, greening of logistics and freight for road and inland waterways, last-mile connectivity, new fuels and vehicles and electric mobility (infrastructure and vehicles). A few of these also include using technology for adaptation in transport. The results of the 80 Days Campaign could be an important input to the continued Technical Expert Meetings that will be part of the continued pre-2020 actions.

In addition a number of the 15 transport initiatives presented in the context of the LPAA are technology based – such as The Zero Emission Vehicle Declaration, the Urban Electric Mobility Initiative, and the C40 Clean Bus declaration. These and also other initiatives like the Netherlands Green Deal Zero Emission Urban Logistics all lead us in the right direction for transport. These examples highlight the commitment of the private sector to deliver affordable and viable options in the technology space, despite a slight lack of clarity at government levels.

SLoCaT is certain that there are many opportunities for countries to take up new and existing technologies in transport; however, the rate that this will happen via the UNFCCC processes is worryingly slow and is unlikely to deliver a technological revolution in transport. Historically, it has been shown that it is very difficult to gauge the speed and success of technology take up – fuel cell buses were hailed as a game changer in the sector 10 to 15 years ago – but this technology has not yet been widely adopted.

On the other hand, electric mobility has become more widespread in a period of five years, accelerating uptake in an impressive way as new technologies come on board to extend vehicle range and reduce charging times. Sales of electric two-wheelers have grown exponentially, but we need to remain pragmatic in this context as all four-wheeled electric vehicles sold in the world represent less than 1% of 88 million vehicles sold, indicating that there is still a long way to go.

Finance for Low Carbon Transport and Economy-Wide Gains

Finance post-2020 was one of the key issues for the negotiations. The expectations of developing countries were high, but developed countries showed some reluctance to commit funds. In the 2010 Cancun commitment, developed countries committed to mobilizing $100 billion per year in climate finance by 2020 through the Green Climate Fund to address the needs of developing
countries, and much of the discussion in Paris focused on the need to scale-up financing beyond 2020.

**How we see the draft outcome document**

The Paris Agreement decided that “developed countries intend to continue their existing collective mobilization goal through 2025 in the context of meaningful mitigation actions and transparency on implementation; prior to 2025 the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall set a new collective quantified goal from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries.”

Reference to increasing the amount of committed funds above USD 100 billion per year from 2020 in a predictable and transparent way is made observing a principle known as ‘progression’. This is in contrast to previous COPs, where the discussion was the mobilization of USD 100 billion by 2020. The role of the Green Climate Fund as well as the continued role of the Global Environment Facility (GEF) to support implementation is highlighted in the Agreement. The review of the adequacy of financial resources for accelerated implementation is described, as part of an accelerated implementation process starting in 2016 and continuing until 2020. Importantly, statements are made that the provision of financial resources would aim to achieve a balance between adaptation and mitigation, compared to past decisions which focused mainly on mitigation.

It is important to note that the final text of the COP21 decision no longer contains many of the detailed provisions on financing that were in the earlier drafts of the COP21 decision (including the penultimate December 10, 21.00 draft). Left out of the final Paris Agreement were the provision “Urges Parties to reduce international support for high-emission investments” and the provision that “when communicating information on a biennial basis to be provided in line with Article 6, paragraph 6, Parties shall consider, as appropriate, the following:

a) Information to increase clarity on the expected levels of climate finance mobilized from different sources;
b) Information on their policies, programmes and priorities;
c) Information on actions and plans to mobilize additional finance;
d) Information on actions to enhance enabling environments in order to mobilize and attract climate finance from a variety of sources;
e) Information on investment plans to implement nationally determined contributions, including financing needs to implement an enhanced level of ambition both on mitigation and adaptation;
f) Information on efforts to integrate climate consideration including resilience into their international development assistance;
g) Information on mobilization of domestic resources;
h) Information on efforts to reduce international support for high emission investments”.

The provision on reducing support for high emission investments, albeit open to a range of interpretations, could have accelerated the discussion on structural economy-wide and sectorial transformation. Likewise the call for detailed reporting on resource requirements and mobilization could have reduced the almost exclusive focus on international climate finance as main source of funding of transformation, especially in developing countries. SLoCaT hopes that these provisions will re-emerge in discussions following COP21.

In addition, references to “results-based payments for verifiable achieved emission reductions related to existing approaches under the Convention,” “parties should integrate climate considerations, including resilience, into international development assistance,” and
“...pricing of greenhouse gas emissions as an important instrument for the reorientation of investment and finance flows consistent with a pathway towards low emission and climate resilient economies” have all disappeared or been toned down in the final outcome documents.

Another missed opportunity is the lack of a reference to the removal of fossil fuel subsidies, which is surprising considering the wide international support for phasing out these wasteful subsidies.

One key concept that survived the cutting down of finance related provisions in the COP21 Decision is that of carbon pricing, though its placement as a final provision in the COP21 chapter dealing with non-Party Stakeholders does appear to somewhat dilute the significance attached to the concept.

How commentators view progress on finance

Overall, commentators reserve judgement on how meaningful COP21 will have been on finance. Climate Change News (Dec 7) identifies that a make or break issue is whether developing countries would accept tough transparency conditions in return for more than USD 100 billion per year. Finance was consistently seen as one of the ‘crunch issues’ and was included in the discussions of what counts as climate finance and whether it is additional to current Official Development Assistance (ODA), or any other financing. Details to follow in the final report.

SLoCaT’s assessment of implications for sustainable, low-carbon transport

Subsides lowering the price of fossil fuels are known to be perverse and damaging. In direct financial terms they are estimated to amount to USD 500 billion per year (International Energy Agency estimate) and 10 times that including the monetized impacts of externalities (International Monetary Fund). The USD 500 billion is five times greater than the planned annual commitment to climate funds. Half of these subsidies are in developing countries with the other half in developed countries.

Many nations have historically advantaged road transport operations compared to other modes by subsidizing diesel fuel and tolerating aged and polluting truck fleets. While the distortionary effects of these direct and indirect subsidies are well recognized, many governments find these policies difficult to abandon due to their appeal to vested interests. Approximately 40 countries, accounting for about 20% of all countries surveyed, were assessed by GIZ in 2010-2011 as having very high diesel fuel price subsidies. Many billions of dollars are provided in subsidies thereby encouraging unsustainable transport energy consumption practices that have clear negative effects in terms of GHG emissions and air pollution.

The IMF has estimated that the removal of fossil fuel subsidies globally would lead to an 11% reduction in GHG emissions, and if these savings were invested in renewables and other clean industries, up to an 18% reduction in GHG emissions could be realised.

In the current era of low oil prices, several countries are taking the opportunity to wind back subsidies. Currently, 13 countries have proposed removal of subsidies in their INDCs and another 28 have proposed some sort of pricing/ taxation instrument in INDCs. Several countries propose the use of financial savings for investment in renewables, showing great potential for the future.

Rational energy pricing, including fossil fuel subsidy reform, is important to mobilize public resources for green investment, to shift behaviour to support climate action and sustainable development, and to support INDC pledges for transport and other sectors. But much more work needs to be done to bring this pricing to fruition, and the COP21 outcome document is silent on
the work that needs to be done. Pricing of carbon – particularly for coal and fossil fuel rich countries as diverse as Germany, the USA, China, and Australia – has been problematic in the past and has been subject to domestic political division, so the challenges of universal carbon pricing should not be underestimated.

Carbon pricing is another key issue emerging from COP21, which is discussed in more detail in the box below.

**COP21 Issue to Watch #4: Carbon Pricing**

Among areas to watch at COP21, carbon pricing has perhaps made the greatest strides in the climate change dialogue. The value of carbon pricing for shaping demand and addressing externalities and raising finance for new low carbon investment is recognized by economists, environmentalists, investors, businesses and the international community. There seems to be broad-based support by business for a universal and predictable carbon price to set a clear signal for investment in low carbon technologies. Leading businesses and investors at COP21 support a number of positions including strengthening financial commitments every five years, enacting meaningful carbon pricing, new and additional carbon finance and transparency and accountability.

Para 137 of the COP21 decision “…recognizes the important role of providing incentives for emission reduction activities, including tools such as domestic policies and carbon pricing,” and other exciting developments on carbon pricing at COP21 took place outside of the decision text. In a high-level event on the first day of COP21, the leaders of France, Mexico, Germany, Chile, Canada, Ethiopia, and the President of the World Bank called for the swift introduction of substantial taxes on carbon. The IEA noted that although each country would surely develop and price carbon according to their own needs and capacities, and recommended it to be introduced as a ‘a BIG FAT price on carbon.’ President François Hollande of France underscored the goal to gradually set a sufficiently high carbon price around the world to encourage ‘better behavior.’

CO2 emissions from transport go down with progressive increases in emissions (fuel economy) standards. Such standards cannot be replaced by carbon pricing because the likely weak link between fuel prices and vehicle use. A price of carbon of **EUR50 per tonne of GHG** would translate to a pump price for petrol of about EUR0.12 per litre or about 5% of the pump price per litre in much of Europe. This price level may not greatly influence individual driving behaviour; however, many years of experience shows that higher fuel prices do influence the type of vehicles (mass and fuel efficiency) that consumers buy and that manufacturers therefore produce.

Similarly, carbon pricing is not a solution to compensating for the impacts of congestion and externalities and its and its temporal and locational impacts. Fuel use only varies weakly with congestion, and thus, congestion charging and other demand management measures would be more effective and efficient instruments for moderating travel demand.

On carbon pricing, several key questions remain. Is pricing of carbon sufficient and can it substitute for regulatory action or other measures to moderate transport demand? Can it reduce congestion and emissions while raising revenues for low carbon activities? If a predictable carbon price exists, would this obviate the need for new regulation on vehicle exhaust emissions or carbon emission standards? And if carbon pricing is scaled up in a global agreement, will those remaining countries with fossil fuel subsidies capitalize on the opportunity to undergo broader pricing reform?

Now that carbon pricing is more firmly on the political agenda, the time has come for the transport sector to do additional homework and determine its role in creating an integrated regulatory agenda to help accelerate action on transport and climate change.
Urgency and Timeliness of Action on Transport and Climate Change

SLoCaT and the PPMC campaigned both before and during the COP that the time for action is now. We are happy to see that our call to action has been answered, if only in part. COP21 has given an unequivocal statement in support of accelerated and more ambitious action on mitigation and adaptation, although for the latter this call to action was still more qualitative than quantitative.

COP21 has underscored the need for action in the pre-2020 period, however without giving specifics on ambition levels. Much of the discussion in COP21 focused on the ambition levels of the INDCs, the implementation of which only starts in 2020. Little was said on whether countries are on track for success in implementing the pre-2020 mitigation targets announced as part of the Cancun Agreements on Climate Change.

As indicated above SLoCaT has concerns as well on the progress achieved in the further development of the means of implementation, especially in the areas of technology and finance, and few immediate results were achieved in those areas. SLoCaT is encouraged by the opening up of new and additional action on capacity building through the establishment of the Paris Committee on Capacity Building, which can be of considerable help in the transformation of the transport sector.

Transport’s Connectivity and Accessibility

While sustainable development appears more thoroughly integrated into the COP21 decision text than in previous years, it seems that human rights, equity, and gender have had a stronger emphasis at the beginning of the COP than at the end of it. Sustainable development is mentioned in the pre-ambles to the agreement, and there are frequent references for the need to address climate change in the context of sustainable development. Yet, the COP21 documents fail to make an explicit linkage, e.g. para 19 of Article 4 stipulates that “All Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances”. A more explicit linkage with the sustainable development agenda as embodied by the Sustainable Development Goals (SDGs) would have been helpful. In the case of the transport sector it can be argued that we face seemingly conflicting agendas when it comes to sustainable development and climate change. There is continued need to improve rural and urban access as well as improve regional connectivity in support of trade, which will necessarily lead to an increase in transport activity. This needs to be explicitly acknowledged in the long-term low greenhouse gas emission development strategies. Thus, while this COP did not make an explicit linkage between the sustainable development and climate change, it has left the door open to do so in the future.

At COP21, The Secretary General’s High Level Advisory Group on Sustainable Transport (HLAGST) gave a COP21 briefing to provide an update on its progress. The group shared perspectives and key messages for sustainable transport for a Paris agreement and the sustainable development agenda. The group aims at finishing a report that recommends raising the level of ambition on sustainability, including climate change, in the transport sector and will host an international conference to bring visibility to the subject.

The New Climate Economy’s “Better Growth, Better Climate” study was presented at COP21, which shows multiple sustainable development benefits of low carbon growth, such as the improvement in air quality, road safety and traffic congestion. The head of the United Nations Development Programme (UNDP) mentioned that climate finance empowers climate action and
boosts sustainable development, as low carbon urban development brings multiple benefits and pushes forward economic growth in cities. Private financing must be incorporated, since public finance will not be able to meet all of the needs of developing countries. Local governments must be funded appropriately, because they are the ones responsible for improving transport resilience. The UNFCCC has developed a mechanism to allow local governments to access the necessary funds to take action without creating a conflict between them and the national governments.

Preparations for the implementation of the Paris Agreement as well as initial implementation of the SDGs and the preparation meetings for Habitat III will dominate 2016, and a more explicit linkage among these three agendas would be extremely helpful for the sustainable transport community. It is important to fully capture the fact that the sustainable transport sector offers a much broader set co-benefits (than e.g. the power sector) by increasing road safety, improving air quality, and providing access to economic opportunity.

Closing Thoughts

At the conclusion of COP21 and on the heels of the Paris Agreement, the SLoCaT Partnership would like to offer some closing thoughts to assess the events of the past two weeks and how we view the path ahead toward COP22 Marrakech for a number of key topics.

SLoCaT is highly optimistic on the topic of post-2020 ambition, based on the overall spirit of the Agreement and the overall structure of mechanisms being put in place to ensure that ambition has the potential to be scaled upward as we near a new 2020 starting line. SLoCaT notes however that a transformational change in transport is not likely to happen purely on a basis of climate change goals, and is more likely to be driven by sustainable development concerns (e.g. as a co-benefit of reducing urban air pollution as a primary policy thrust). For this reason, the transport sector could benefit from a stronger linkage between the post-2015 development agenda and the climate change agenda to improve the chances of translating mitigation and adaptation ambition into implementation.

In contrast, SLoCaT is significantly less enthusiastic about the treatment of pre-2020 action within the scope of the Paris Agreement. While the outcome document devotes four full pages to the topic of pre-2020 action, it offers additional guidance beyond reiterating the call for Parties “to make and implement a mitigation pledge under the Cancun Agreements” and resolving to strengthen the existing technical examination process in the 2016-2020 period to accelerate the development and dissemination of technologies with high mitigation potential. It is most essential that the urged national mitigation commitments so indeed materialize, and that they are matched with sufficient financing and technology transfer resources in the pre-2020 period to provide relief from climate impacts for the most vulnerable Parties both pre- and post-2020. As noted by the South African delegation following the announcement of the Agreement “The closing of the pre-2020 ambition gap is essential, and the work of the COP in this regard must remain our focus.”

Furthermore, the COP21 agreement does not foresee substantive review and strengthening of INDC ambition levels for the 2020-2025 period, despite the fact that there was broad consensus that ambition levels currently captured in INDCs are on a projected course for a 2.7 degree Celsius increase and thus are likely to fall well short of a 2DS let alone a 1.5 DS. The final Agreement includes no language for further tightening ambition during this period (with the exception of a minor clause for updating those INDCs with a 2030 rather than a 2025 timeframe), and useful language on this topic was removed in the final draft (vis-à-vis December 10 draft); thus, there is a clear danger that 2020-2025 could become “lost period” for increasing mitigation
ambition. In summary, if we have weak efforts pre-2020 and inadequate 2020-2025 INDCs, the transport sector is likely to be placed on a trajectory that makes it increasingly unlikely to achieve a 1.5DS by 2030 or 2050.

SLoCaT welcomes efforts in the Agreement to increase **transparency and MRV** for all Parties in translating mitigation commitments into action, acknowledging that much of the work in this area will be done two to three years from now, so it is too early to declare victory. A key outstanding question is whether efforts in this area would be sufficiently sector specific, as there has been little tendency up to now from UNFCCC to move into the level of sector-specific discussions, which are necessary from a transport sector perspective. Economy-wide targets have limited utility, and only a dozen countries have set a transport sector-specific target in their INDCs; thus, it must be acknowledged in forthcoming action on transparency and MRV that economy-wide reductions will ultimately be realized through sector-specific policies and instruments.

One critical area in which the draft Agreement is not providing guidance is on **emissions from international aviation and shipping**. After being included in earlier drafts of the Agreement (following ongoing discussion of this topic since the ADP 2-8 session in February 2015), all references to these rapidly growing sources of emissions have been removed from the ongoing dialogue. With projected emissions increases of 250-300% in these sectors by 2050, many actors rightly feel that this omission is a cause for serious concern; it should also be noted that successes in climate change mitigation in the land transport sector might be compromised if they are not mirrored by equally ambitious and transformative actions on international aviation and shipping.

On the topic of **adaptation**, SLoCaT sees cause for optimism in the movement toward growing parity with mitigation with regard to focuses on policy, funding, and technology. However, despite positive steps taken in the direction of adaptation, it should be noted that adaptation goals in the Agreement are mostly qualitative. Thus, SLoCaT will reserve judgment while awaiting efforts to be put in place over the next two to three years which should include taking additional steps to allow adaptation to catch up to mitigation knowledge base that has been developed over many years to set specific quantitative targets to accelerate action on adaptation in the transport sector.

Finally, regarding **means of implementation**, SLoCaT notes that the Paris Agreement adds little to discussion in this area, as the means to implement appear less ambitious than the targets to be implemented. In the area of **technology**, it will be necessary to complement a country-based approach to assessing technical needs with an expanded dialog with industry to match these needs with technical solutions, a process which will be particularly important in the case of the transport sector. Regarding **finance**, a narrowing down to focusing on climate finance in the final version of the COP21 decision is not helpful for the transport sector, and it will be necessary to bring other proposed funding elements (including public and private sector sources) back into the discussion. A renewed focus on **capacity building** in the Agreement is however a welcome development and will be key to the success of the forthcoming implementation of country commitments, and will thus be an essential element in moving sustainable transport from project-based paradigms to a more programmatic approach.

SLoCaT believes that the Paris Agreement and COP21 decision can change the narrative on non-Party engagement in the UNFCCC processes. We believe that in addition to the continued engagement of transport sector through “traditional” non-Party roles (e.g. through the Lima-Paris Action Agenda, and the mobilizing non-Party actors to take action), the Paris Agreement provides non-Party stakeholders with a mandate and a more distinct role in the follow-up to the Paris Agreement, which will allow the transport sector to engage more actively with UNFCCC Secretariat to advance climate actions.
Specific opportunities for the SLoCaT Partnership and the sustainable transport community under the Paris Agreement (in areas including those described above) are spelled out in more detail in Annex 1, based on specific paragraphs of the Agreement, which include the following topics:

(a) INDCs
(b) Mitigation potential of transport (including a transport 1.5DS)
(c) Adaptation potential of transport
(d) Finance
(e) Technology
(f) Capacity building
(g) Global stocktake
(h) Facilitating implementation and compliance
(i) Pre-2020 actions
(j) Non-Party stakeholders

Thus, in this initial look back, SLoCaT concludes that COP21 offers not only opportunities but also responsibilities for the transport sector, which must be carried forth by all segments of the sustainable transport community, through the concerted efforts of transport experts and advocates, financing institutions, national ministries, and international bodies. With the ink barely dry on the Paris Agreement, we are anticipating the hard work ahead, which will be necessary to ensure that the collective spirit of last week’s proceedings are quickly translated into concrete steps toward the ambitious targets – most importantly the aspiration to reach a 1.5 degree scenario. While hopes are high, the burden of expectation is higher, as noted in the COP21 closing session by the representative of South Africa, which launched the process for creating the Paris Agreement four years ago in Durban, who quoted Nelson Mandela in her remarks on “turning the finish line that is Paris into a new starting line for the ongoing process that leads to Marrakech and beyond”.

“I have walked that long road to freedom… I have not faltered, [though] I have made many missteps along the way. I have taken a moment here to rest, to steal a view of the glorious vista that surrounds me…but I can only rest for a moment, for with freedom comes responsibilities and I dare not linger, because my long walk is not ended.”

Transport Champions of the Day

Throughout COP21, SLoCaT daily reports highlighted progress in the transport sector at national levels, as reflected in national-level transport measures in Intended Nationally-Determined Contributions (INDCs) and by subnational actors through a number of transport commitments linked to the Lima Paris Action Agenda (LPAA).

Transport-Focused INDC of the Day

Jordan has set a target of 14% below 2030 BAU scenario emissions in its INDC, conditional on international support. Proposed transport measures in Jordan’s INDC include a 25% increase in the share of commuters using public transport by 2025; reduction in fuel consumption and emissions through the implementation of a sustainable transport strategy; and reduction in vehicle kilometers both at national levels and in densely populated areas.
Jordan also plans to implement a national BRT system; a railway system to anchor a planned multimodal network and to play a major role in the transport of goods within the country and surrounding region; and to implement policies to enhance fleet efficiency and reduce emissions.

Jordan’s INDC can be viewed [here](#), and SLoCaT’s transport-focused analysis of INDCs can be viewed [here](#).

**Transport Initiative of the Day**

The Navigating a Changing Climate Initiative of PIANC (the World Association for Waterborne Transport Infrastructure) provides technical support on climate change mitigation and adaptation to the owners, operators and users of waterborne transport infrastructure. Its action plan was released during COP21.

Under the motto, “Think climate to reduce emissions, strengthen resilience, and adapt waterborne transport infrastructure,” the multi-stakeholder coalition aims to deliver integrated, sustainable solutions for waterborne transport and to promote the shift to low-carbon inland and maritime navigation infrastructure. It also focuses on building capacity and enhancing decision-making on mitigation and adaptation options and developing sector-specific technical and institutional resources. In addition, raising awareness of the need to act now is a key action of the initiative to improve preparedness and strengthen the resilience of waterborne transport infrastructure, with an emphasis on working with nature.

For more information, please see the [Navigating a Changing Climate Initiative](#) website.

**Best Practice Climate Action in Transport (80 Days Campaign)**

The “Around the World in 80 Days Campaign” documents and communicates climate actions in the transport sector. The 80 Days Campaign is an initiative of the Netherlands government and the Paris Process on Mobility and Climate (PPMC). It references the famous Jules Verne novel to create a time-bound process prior to COP21.

On the last day of the COP21 journey, we would like to bring you back to the European continent:

SynchroMania – “Serious” Gaming in Container logistics

A ‘serious’ game, SynchroMania, makes it possible for all those involved in logistics planning (e.g. planners, sales representatives) to experience firsthand how synchro-modal planning works and the decisions it requires. The game also outlines the benefits that can be obtained from reducing the number of constraints and enhancing collaboration; not only between planners responsible for various corridors, but also among other stakeholder categories including salespersons and customers. In this way the game helps to establish new viewpoints to increase freight efficiency.

In the game, players step into the shoes of a planner tasked with finding the optimal route to ship orders placed by three demanding clients to various locations within a container network. In planning each order, the planner must strive to comply with the specific requirements imposed by each client while also optimizing overall costs and emissions levels.

Also worthy of note is the complementary Netherlands project hybrid electric inland barge.

For more information of the transport climate action, please see here.

www.ppmc-cop21.org
We would like to invite our readers to join the We Are Transport social media campaign we have launched on Twitter. PPMC invites everyone to support the We Are Transport Campaign and join the discussion on Twitter using hashtag #WeAreTransport. For more information, please visit http://ppmc-cop21.org/common-messages/.
Annex 1: Opportunities for the Transport Sector to Engage in the Implementation of COP21 Decision and Paris Agreement

I. Intended Nationally Determined Contributions (INDCs):

- *Work with interested Parties on transport related parts of INDCs* in the context of “provide support for the preparation and communication of the intended nationally determined contributions of Parties that may need such support”. (Para. 15 Decision -/CP.21)

- *Update the SLoCaT analysis of submitted INDCs* in the context of “Requests the secretariat to update the synthesis report referred to in paragraph 16 above so as to cover all the information in the intended nationally determined contributions communicated by Parties pursuant to decision 1/CP.20 by 4 April 2016 and to make it available by 2 May 2016”. (Para. 19 Decision -/CP.21)

- *Carry out more in-depth analysis of Party efforts on transport and climate change* in the context of: “Convene a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term goal referred to in Article 4, paragraph 1, of the Agreement and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8, of the Agreement”. (Para. 20 Decision -/CP.21)

- *Update SLoCaT assessment of mitigation potential of the transport sector* in the context of: “Requests the Intergovernmental Panel on Climate Change to provide a special report in 2018 on the impacts of global warming of 1.5\(\Rightarrow\) above pre-industrial levels and related greenhouse gas emission pathways; (Para. 21 Decision -/CP.21)

II. Decision to give effect to the Agreement

**Mitigation**

- *Communicate on a regular basis the mitigation and adaptation potential of the transport sector to parties* in the context of: “Urges those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2025 to communicate by 2020 a new nationally determined contribution and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement; (Para. 23 Decision -/CP.21). "Requests those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2030 to communicate or update by 2020 these contributions and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement". (Para. 24 Decision -/CP.21)

- *Align overview of transport components of INDCs with:* “requests the secretariat to make available an interim public registry in the first half of 2016 for the recording of nationally determined contributions submitted in accordance with Article 4 of the Agreement”. (Para. 30 Decision -/CP.21)

- *Communicate mitigation potential and best practices on mitigation of climate change* in the context of “the Forum on the Impact of the Implementation of response measures to address the effects of the implementation of response measures under the Agreement by enhancing cooperation amongst Parties on understanding the impacts of mitigation actions under the Agreement and the exchange of information, experiences, and best practices amongst Parties to raise their resilience to these impacts”. (Para. 34 Decision -/CP.21)

- *Clarify the complementary nature of transport related action in support of sustainable development and climate change* in the context of: “Invites Parties to communicate, by 2020, to the secretariat mid-century, long-term low greenhouse gas emission..."
development strategies”. (Para. 36 Decision -/CP.21)

- Document the experiences of transport sector in market based and non-market based instruments in the context of: “adopt rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Agreement on the basis of: …. (f) Experience gained with and lessons learned from existing mechanisms and approaches adopted under the Convention and its related legal instruments”. (Para. 38 Decision -/CP.21)

“Also requests the Subsidiary Body for Scientific and Technological Advice to undertake a work programme under the framework for non-market approaches to sustainable development referred to in Article 6, paragraph 8, of the Agreement”. (Para. 38 Decision -/CP.21)

Adaptation

- Synthesize methodologies and tools to assess adaptation needs in the transport sector in the context of: “Requests the Adaptation Committee, taking into account its mandate and its second three-year workplan, and with a view to preparing recommendations for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session ….. (b) To consider methodologies for assessing adaptation needs with a view to assisting developing countries, without placing an undue burden on them”. (Para. 43 Decision -/CP.21)

- Compile on a regular basis information on transport related adaptation actions in the context of: “Invites all relevant United Nations agencies and international, regional and national financial institutions to provide information to Parties through the secretariat on how their development assistance and climate finance programmes incorporate climate-proofing and climate resilience measures”. (Para. 44 Decision -/CP.21)

- Strengthen knowledge management, capacity building and policy dialogue on transport and adaptation in the context of: “Requests Parties to strengthen regional cooperation on adaptation where appropriate and, where necessary, establish regional centres and networks, in particular in developing countries, taking into account decision 1/CP.16, paragraph 13”. (Para. 45 Decision -/CP.21)

- Assist in the development of programs and projects on enhanced action on adaptation in the transport sector in the context of: “(a) Taking the necessary steps to facilitate the mobilization of support for adaptation in developing countries in the context of the limit to global average temperature increase referred to in Article 2 of the Agreement” and “the Green Climate Fund to expedite support for the least developed countries and other developing country Parties for the formulation of national adaptation plans, consistent with decisions 1/CP.16 and 5/CP.17, and for the subsequent implementation of policies, projects and programmes identified by them”. (Para. 47 Decision -/CP.21)

Finance

- Collect, analyze and disseminate information on the use of International Climate Finance for transport in the context of: “Decides that, in the implementation of the Agreement, financial resources provided to developing countries should enhance the implementation of their policies, strategies, regulations and action plans and their climate change actions with respect to both mitigation and adaptation to contribute to the achievement of the purpose of the Agreement as defined in Article 2; (Para. 53 Decision -/CP.21)

- Collect, analyze and disseminate information on the use of public sector funds to support action on transport and climate change in the context of: “Requests Subsidiary Body for Scientific and Technological Advice to develop modalities for the accounting of financial resources provided and mobilized through public interventions in accordance with Article 9, paragraph 7, of the Agreement for consideration by the Conference of the Parties at its twenty-fourth session (November 2018)”. (Para. 58 Decision -/CP.21)
Promote a more systematic use of International Climate Finance to promote action on transport and climate change in the context of: “Decides that the Green Climate Fund and the Global Environment Facility, the entities entrusted with the operation of the Financial Mechanism of the Convention, as well as the Least Developed Countries Fund and the Special Climate Change Fund, administered by the Global Environment Facility, shall serve the Agreement” (Para. 59 Decision-/CP.21)

Technology

To collect, analyze and disseminate information on technology development to support action on transport and climate change in the context of: “Decides to strengthen the Technology Mechanism” (Para. 67 Decision-/CP.21); “the elaboration of the technology framework established under Article 10, paragraph 4, of the Agreement; … (a) The undertaking and updating of technology needs assessments, as well as the enhanced implementation of their results, particularly technology action plans and project ideas, through the preparation of bankable projects; … and (c) The assessment of technologies that are ready for transfer”. (Para. 68 Decision-/CP.21)

Capacity Building

To intensify action on capacity building on mitigation of, and adaptation to, climate change in the transport sector as well documenting these and communicating them in the context of: “Decides to establish the Paris Committee on Capacity-building whose aim will be to address gaps and needs, both current and emerging, in implementing capacity-building in developing country Parties and further enhancing capacity-building efforts, including with regard to coherence and coordination in capacity-building activities under the Convention”(Para. 72 Decision-/CP.21) and “Further decides to launch a work plan for the period 2016–2020 with the following activities: (a) Assessing how to increase synergies through cooperation and avoid duplication among existing bodies established under the Convention that implement capacity-building activities, including through collaborating with institutions under and outside the Convention”. (Para. 74 Decision-/CP.21)

Communicate the importance of capacity building to support action on transport and climate change in the context of: “Decides that the Paris Committee on Capacity-building will annually focus on an area or theme related to enhanced technical exchange on capacity-building, with the purpose of maintaining up-to-date knowledge on the successes and challenges in building capacity effectively in a particular area” (Para. 75 Decision-/CP.21) and “Also requests the Subsidiary Body for Implementation to develop the terms of reference for the Paris Committee on Capacity-building, in the context of the third comprehensive review of the implementation of the capacity-building framework, also taking into account paragraphs 75, 76, 77 and 78 above and paragraphs 82 and 83 below, with a view to recommending a draft decision on this matter for consideration and adoption by the Conference of the Parties at its twenty-second session”. (Para. 77 Decision-/CP.21)

Collect and disseminate information on Measuring, Reporting and Verification of emission reductions in the transport sector in the context of: “Decides to establish a Capacity-building Initiative for Transparency in order to build institutional and technical capacity, both pre- and post-2020. This initiative will support developing country Parties, upon request, in meeting enhanced transparency requirements as defined in Article 13 of the Agreement in a timely manner”. (Para. 85 Decision-/CP.21) and Requests the Ad Hoc Working Group on the Paris Agreement to develop recommendations for modalities, procedures and guidelines in accordance with Article 13, paragraph 13, of the Agreement, and to define the year of their first and subsequent review and update, as
appropriate, at regular intervals, for consideration by the Conference of the Parties, at its twenty-fourth session, with a view to forwarding them to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for adoption at its first session; (Para. 92 Decision -/CP.21)

Global Stocktake

- Collect and disseminate information on Measuring, Reporting and Verification of emission reductions in the Transport Sector in the context of “Requests the Ad Hoc Working Group on the Paris Agreement to identify the sources of input for the global stocktake referred to in Article 14 of the Agreement and to report to the Conference of the Parties, with a view to the Conference of the Parties making a recommendation to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session” (Para. 100 Decision -/CP.21)

Facilitating Implementation and Compliance

- Assess reported transport sector emissions, and compare with others sources, in the context of: “Also requests the secretariat, solely for the purposes of Article 21 of the Agreement, to make available on its website on the date of adoption of the Agreement as well as in the report of the Conference of the Parties at its twenty-first session, information on the most up-to-date total and per cent of greenhouse gas emissions communicated by Parties to the Convention in their national communications, greenhouse gas inventory reports, biennial reports or biennial update reports”. (Para. 105 Decision -/CP.21)

III. Enhanced Action Prior to 2020

- Compile transport related information in the context of: “(b) Urging all Parties that have not already done so to make and implement a mitigation pledge under the Cancun Agreements; …..(d) Inviting developing country Parties that have not submitted their first biennial update reports to do so as soon as possible; (e) Urging all Parties to participate in the existing measurement, reporting and verification processes under the Cancun Agreements, in a timely manner, with a view to demonstrating progress made in the implementation of their mitigation pledges”. (Para. 106 Decision -/CP.21)

- Document linkage between action in transport sector in support of sustainable development and climate change in the context of: “Recognizes the social, economic and environmental value of voluntary mitigation actions and their co-benefits for adaptation, health and sustainable development”. (Para. 109 Decision -/CP.21)

- Promote transport focus in the context of: “Resolves to strengthen, in the period 2016–2020, the existing technical examination process on mitigation as defined in decision 1/CP.19, paragraph 5(a), and decision 1/CP.20, paragraph 19, taking into account the latest scientific knowledge, including by: (a) Encouraging Parties, Convention bodies and international organizations to engage in this process, including, as appropriate, in cooperation with relevant non-Party stakeholders, to share their experiences and suggestions, including from regional events, and to cooperate in facilitating the implementation of policies, practices and actions identified during this process in accordance with national sustainable development priorities; (b) Striving to improve, in consultation with Parties, access to and participation in this process by developing country Party and non-Party experts; and (d) Encouraging Parties to make effective use of the Climate Technology Centre and Network to obtain assistance to develop economically, environmentally and socially viable project proposals in the high mitigation potential areas identified in this process”. (Para. 110 Decision -/CP.21)
• Collect, analyze and disseminate information on mitigation potential in the transport sector in the context of: “Requests the secretariat to organize the process referred to in paragraph 110 above and disseminate its results, including by … (b) Updating, on an annual basis, following the meetings referred to in paragraph 112(a) above and in time to serve as input to the summary for policymakers referred to in paragraph 112(c) below, a technical paper on the mitigation benefits and co-benefits of policies, practices and actions for enhancing mitigation ambition, as well as on options for supporting their implementation, information on which should be made available in a user-friendly online format; … (c) Preparing, in consultation with the champions referred to in paragraph 122 below, a summary for policymakers, with information on specific policies, practices and actions representing best practices and with the potential to be scalable and replicable, and on options to support their implementation, as well as on relevant collaborative initiatives”. (Para. 112 Decision -/CP.21)

• Communicate transport related efforts in the context of: “Decides to conduct a facilitative dialogue in conjunction with the twenty-second session of the Conference of the Parties to assess the progress in implementing decision 1/CP.19, paragraphs 3 and 4, and identify relevant opportunities to enhance the provision of financial resources, including for technology development and transfer and capacity-building support, with a view to identifying ways to enhance the ambition of mitigation efforts by all Parties, including identifying relevant opportunities to enhance the provision and mobilization of support and enabling environments”. (Para. 116 Decision -/CP.21)

• Continue efforts on transport as part of the Lima-Paris Action Agenda in the context of: “Acknowledges with appreciation the results of the Lima-Paris Action Agenda, which build on the climate summit convened on 23 September 2014 by the Secretary-General of the United Nations” (Para. 117 Decision -/CP.21) “Welcomes the efforts of non-Party stakeholders to scale up their climate actions, and encourages the registration of those actions in the Non-State Actor Zone for Climate Action platform; (Para. 118 Decision -/CP.21) “Encourages Parties to work closely with non-Party stakeholders to catalyse efforts to strengthen mitigation and adaptation action”. (Para. 119 Decision -/CP.21) “Provides an opportunity for announcing new or strengthened voluntary efforts, initiatives and coalitions, including the implementation of policies, practices and actions arising from the processes referred to in paragraph 110 above and paragraph 125 below and presented in the summary for policymakers referred to in paragraph 112(c) above; (c) Takes stock of related progress and recognizes new or strengthened voluntary efforts, initiatives and coalitions; (d) Provides meaningful and regular opportunities for the effective high-level engagement of dignitaries of Parties, international organizations, international cooperative initiatives and non-Party stakeholders” (Para. 121 Decision -/CP.21)

• Communicate the importance of, and potential for, action on adaptation in the transport sector in the context of: “Decides to launch, in the period 2016-2020, a technical examination process on adaptation” (Para. 125 Decision -/CP.21) “Decides that the process referred to in paragraph 125 above will be pursued by: (a) Facilitating the sharing of good practices, experiences and lessons learned; (b) Identifying actions that could significantly enhance the implementation of adaptation actions, including actions that could enhance economic diversification and have mitigation co-benefits; (c) Promoting cooperative action on adaptation; (d) Identifying opportunities to strengthen enabling environments and enhance the provision”. (Para. 128 Decision -/CP.21); Requests the secretariat to support the technical examination process referred to in paragraph 125 above by: (a) Organizing regular technical expert meetings focusing on specific policies, strategies and actions (b) Preparing annually, on the basis of the meetings referred to in paragraph 130(a) above and in time to serve as an input to the summary for policymakers referred to in paragraph 112(c) above, a technical paper on opportunities to enhance adaptation action, as well as options to support their implementation,
information on which should be made available in a user-friendly online format”; (Para. 130 Decision -/CP.21) and “Invites Parties and observer organizations to submit information on the opportunities referred to in paragraph 126 above by 3 February 2016” (Para. 133 Decision -/CP.21)

IV. Non-Party Stakeholders

- Mobilize non-Party stakeholders to intensify action on transport and climate change in the context of: “Welcomes the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities”; (Para. 134 Decision -/CP.21); “Invites the non-Party stakeholders referred to in paragraph 134 above to scale up their efforts and support actions to reduce emissions and/or to build resilience and decrease vulnerability to the adverse effects of climate change and demonstrate these efforts via the Non-State Actor Zone for Climate Action platform4 referred to in paragraph 118 above”; (Para. 135 Decision -/CP.21); and “Recognizes the need to strengthen knowledge, technologies, practices and efforts of local communities and indigenous peoples related to addressing and responding to climate change, and establishes a platform for the exchange of experiences and sharing of best practices on mitigation and adaptation in a holistic and integrated manner (Para. 136 Decision -/CP.21)

- Assess the implications of applying a carbon price in the transport sector in the context of: “Also recognizes the important role of providing incentives for emission reduction activities, including tools such as domestic policies and carbon pricing”. (Para. 137 Decision -/CP.21)