

AMBITIOUS ACTION
on Transport and
Climate Change
FEASIBLE NOW



Transport @COP21 Paris

DAY ONE – 30 November 2015



SLoCaT's Opening Perspective on COP21

Paris is not Copenhagen. Although both hospitable but cold cities SLoCaT sees large differences between COP 15 that took place in 2009 in Copenhagen and COP 21, which started today here in Paris.

COP 15 in Copenhagen did certainly not lack for ambition and optimism before the event started. There was anticipation in the air, which unfortunately never materialized into a concrete agreement. Since Copenhagen much work has been done on developing a bottom-up agreement that can carry the support of the world community. We have seen almost all the countries in the world do their homework to come up with strategies (Intended Nationally Determined Contributions) that outline their commitment on mitigation and adaptation.

Suddenly we see references galore to transport in the context of the UNFCCC. This clearly makes us hopeful that after many years of relative neglect transport is becoming a more regular part of discussions during COPs.

It was a pleasant surprise also today to hear world leaders speak about sustainable transport in their official remarks during the formal opening of COP21. Is it perhaps then also no coincidence

to see well over 30 transport related events in the coming 2 weeks, as many as the combined number from the last 5 COPs.

During this COP we will hear much about the actions taken by non-State actors on sustainable transport. SLoCaT is proud to have been chosen by the Lima Paris Action Agenda to organize the December 3 Transport Focus. The first time that transport is a formal part of the program of the COP.

We have prepared well for this COP and we hope that you will find time to take a look at the different [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.

If we are optimistic and upbeat about COP21 and what it can do for the transport sector it is because we know that many organizations have been working towards this moment. "Success has many fathers" certainly applies here. We thank all of our partners, sponsors and supporters in the Paris Process on Mobility and Climate (PPMC), who jointly can claim ownership for what we hope and expect will be a historic COP from the transport perspective.

- Cornie Huizenga, Secretary General, SLoCaT Partnership

KEY FOCUS AREAS ON TRANSPORT AND CLIMATE CHANGE

Throughout COP21, the SLoCaT Partnership will report on progress in the following six areas as featured in negotiations and other events, to reflect the structure of the recently launched [We Are Transport](#) campaign. The campaign brings together all transport modes and sub-sectors under the common purpose of combating climate change:

Decarbonization of the Transport Sector:

Expanding low-carbon transport must be a priority in addressing climate change. The transport sector currently represents 23% of global GHG emissions from fuel combustion, and at present the sector is still almost totally dependent on fossil fuel and accounts for almost 60% of global oil use. According to most projections, transport emissions will continue to increase in the coming decades, resulting from growing demand for mobility, especially in the developing world. This is not compatible with a 2°C or less scenario.

Investing in low carbon transport networks for passengers and goods is now found to be cheaper in the medium to long term, and today's investments in sustainable transport will pay economic, social and climate dividends now and for future generations. However, the reverse is also true, as investments now in carbon-intensive transport systems will lock-in countries and cities on unsustainable development paths.

Sustainable transport for all is economically and technically feasible but requires ambitious action and strong political to tackle difficult issues. Reflecting this fact, nearly 150 heads of state from around the globe have convened in Paris to open COP21 and express their common resolve to tackle climate change from varying national perspectives. Among statements delivered, Chinese President Xi Jinping noted low-carbon transport as a priority strategy for achieving needed reductions in GHG emissions, and President Horacio Manuel Cartes of Paraguay shared his

country's plans to renovate the complete public transport to reduce fuel consumption. Other countries referencing transport in their statements include Andorra, Panama, Kenya, Canada, Pakistan, Jordan, Israel, Thailand, and South Korea. These references to low carbon transport by world leaders signify a significant step forward in the integration of transport in the UN process.

While these brief statements offer little space for elaboration, county-level plans for mitigation action in transport and other sectors are detailed in Intended Nationally-Determined Contributions (INDCs) submitted to the UNFCCC. Among the 133 INDCs submitted as of November 12, 2015, 77% explicitly identify the transport sector as a mitigation source, and more than 61% of INDCs propose transport sector specific mitigation measures. In addition, 10% of INDCs include a transport sector emission reduction target, and 14% of INDCs include assessments of country-level transport mitigation potential.

In this context, the SLoCaT Partnership has developed two knowledge products focused on decarbonization efforts; the first entitled [INDCs Offer Opportunities for Ambitious Action on Transport and Climate Change](#), and the second entitled [Emission Reduction Potential in the Transport Sector by 2030](#), which assesses the contribution of the transport sector towards achieving a two-degree Celsius scenario by 2030.

Adaptation and Climate Resilience in the Transport Sector

The daily functioning of most transport systems is sensitive to fluctuations in precipitation, temperature, winds, and visibility. Cities located in coastal areas or near rivers are at greater risk to damage from rising sea levels and flash flooding, and with 80% of the world's population living on coastal plains or near rivers, adapting our transport networks to a rapidly changing climate is a growing imperative.

Paved roads are particularly vulnerable to temperature extremes, while unpaved roads and bridges are more vulnerable to extremes in precipitation. Rail system failures are known stem from high temperatures, icing and storms, while urban public transport systems are vulnerable to similar impacts. All of these impacts have consequences on the design, construction and alignment of roads, railways and other transport infrastructure. While countries are investing massively in transport infrastructure – an estimated global spending of \$1.4 to 2.1 trillion per year – very few are aware of the impact climate change will have on these infrastructure investments.

While the attention of most countries and other actors in the transport sector is still largely focused on climate change mitigation, it is encouraging to see that initial building blocks for greater action on adaptation in the transport sector are in the process of being developed. Thus COP21 is a unique opportunity to rally governments and development partners around building more substantive and comprehensive approaches in the area of transport adaptation and resilience.

SLoCaT has developed a knowledge product entitled [Expanding Efforts on Climate Change Adaptation and Resilience in the Transport Sector](#) in the Transport Sector, which describes the substantive work underway on the development of a knowledge base, guidelines and toolkits, and the initial steps being taken to increase the profile of climate adaptation in national climate policies and in the transport portfolios of international financing institutions and climate finance instruments.

Urgency and Timeliness of Action on Transport and Climate Change

The urgency to address climate change has never been stronger, as we are already at the end of 2015, and according to the IPCC we need to stabilize and start reducing GHG emissions by 2020 when the new climate agreement should be fully adopted. As transport accounts for about 60% of global oil consumption, 27% of all energy use, and around a quarter of energy-related CO₂, the sector must also be the focus of concerted and accelerated mitigation actions.

Both transitional and transformative actions to rethink our transport networks will be crucial to make progress towards low carbon economies and to speed up the global economic recovery. The role of cities and non-state actors as well as national governments is key to achieving accelerated action. Time is running out, and ambitious action in all areas of transport must be scaled up and accelerated. The transport sector is ready to deliver on climate, but in order to accomplish this, COP 21 must also deliver on transport.

In the ADP opening plenary on November 29, several delegates, including the representatives of Tuvalu and the COP21 president Laurent Fabius, expressed the need to conclude ADP's work by December 4 so as to leave few pending issues for ministers to decide on during the second week of the COP. The aim of this plenary was to establish spin-off groups for [technology development and transfer, and capacity building; and ADP Workstream 2 (pre-2020 ambition), which focuses on accelerating mitigation actions before an anticipated global agreement will take effect.

For Small Island Developing States like Tuvalu, the urgency of rapidly concluding the ADP exercise is more than academic, as its representative noted, "If we manage to save Tuvalu we save the world."

Transport's Connectivity and Accessibility

Transport is a strong enabler of other sectors such as education, health and the economy to reduce poverty. Enhancing connectivity and accessibility with low-carbon, sustainable transport is key to realizing climate goals as it facilitates mobility while reducing the carbon intensity of the sector. Our present model for mobility does not recognize or provide equal rights to mobility, as a disproportionate amount of public spending goes to providing fossil fuel-based infrastructure for those that can afford to own and use cars, which is directly correlated to the high rate of growth of emissions from the transport sector.

Nonetheless, there is growing evidence that actions to promote accessibility and connectivity for low-income people also do more to mitigate climate change. Securing mobility with public transit and other sustainable transport options increases equity and helps to alleviate poverty by enhancing economic opportunity, while also improving road safety. Walking and cycling can also be made more widely available as infrastructure improvements for these modes are much cheaper than for motorized modes.

For example, with the aid of GIZ, the Transport NAMA in Colombia promotes not only an integral system of public transport but also active transport, by giving bicycles priority parking at transit stations and placing automobile parking spaces further away to reduce cars driving to the city center. The expected impacts of these projects include ambitious actions that encourage non-motorized transport and a 50% reduction of urban transport emissions. Similarly, Colombia's INDC states the need for transport demand management and congestion charging policies in cities with more than 300,000 inhabitants.

The CODATU initiative MobiliseYourCity aims to engage one hundred cities worldwide in sustainable urban mobility planning to reduce CO2 emissions. Currently they are working in ten different cities in developing countries and have a list of interested countries seeking technical assistance and financial aid to shift to more sustainable urban mobility.

Furthermore, in his remarks at the Leaders Event, the President of Peru, His Excellency Mr. Ollanta M. Humala Tasso, stressed the importance of linking the outcomes from COP21 to the Sustainable Development Agenda. By accommodating the widest range of users, transport can directly influence the achievement of SDG targets in a number of areas, including poverty alleviation, food security, road safety, and regional connectivity. This reflects the dual roles of transport connectivity and accessibility in achieving sustainable development and mitigating climate change.

In this context, the [Third World Network newsletter](#) highlighted key questions and issues related to equity that need to be resolved at COP21. These include whether the agreement will be mitigation-centric, and whether developing country contributions should be unconditional and legally binding. Another issue to be resolved relates to the harmonization of successive mitigation contributions in 5- or 10-year timeframes, as the current negotiating text requires that each Party's mitigation contribution will be progressively ambitious over time. Delegates will also debate about whether there should be a consultative period or *ex ante* consideration of mitigation contributions proposed by Parties, prior to their finalization. The negotiations should also determine whether Parties would be allowed to use of international carbon markets in reducing their emissions. This is of particular relevance to the transport sector as the aviation and maritime sub-sectors can boost their mitigation efforts by participating in such markets.

Technological Dynamism and Innovation for Transport

Reducing emissions from the transport sector relies on harnessing new technologies such as electric vehicles and alternative fuels, as well as deploying innovative approaches to transport demand management such as Integrated Transport Systems (ITS), congestion pricing and access control. Technological dynamism and innovation can also improve the efficiency of existing transit options including public transport facilities and traffic control systems that regulate driving speeds to minimize emissions. Through pedestrian-friendly infrastructure and transit-corridor development, countries can develop sustainable mobility strategies that make the best use of available technologies.

The [Climate Action Network's ECO newsletter](#) notes that the current Paris draft decision text focuses primarily on technology needs assessments (TNA) and the creation of a new technological framework, in contrast to a dearth of substantive commitments for technology development and transfer in the draft agreement text, including any obligations for the development of sustainable transport infrastructure and services. Nonetheless, references to this new framework suggest it will not only address TNAs, but also enabling environments, capacity building, and mechanisms for technology transfer. This means that there is ample room to incorporate sustainable mobility solutions in technology support to developing countries to build upon the implementation of TNAs.

SLoCaT has developed a knowledge product entitled [Renewable Energy and Transport: Decarbonising Fuel in the Transport Sector](#), which notes that the transport is currently the least diversified energy end use sector, consuming only about 3.5% of renewable energy globally in 2013, and describes national policies and strategies intended to expand the use of renewable energy for transport through biofuels, electric mobility, and other measures.

Finance for Low Carbon Transport and Economy-Wide Gains

At COP21, countries need to make substantive commitments towards domestic spending on sustainable transport and enhance the international climate finance regime to fund low-carbon transport. Significant transformational investments amounting to trillions of dollars are needed over coming decades to shape sustainable, low-carbon transport systems, especially in the developing regions such as Africa, Asia and Latin America. Historically, public sector spending has been the major source of finance for transport but the private sector and international climate finance will be increasingly important in closing the sustainable transport funding gap.

Furthermore, financing sustainable transport infrastructure and services is cheaper than investment in traditional fossil fuel-based infrastructure. These savings arise from less infrastructure being required in denser and more compact cities as well as reduced fuel and maintenance costs and less energy used. Other co-benefits include better air quality and fewer accidents. Thus, such benefits help to expand economic opportunity and contribute towards a healthy and more productive society.

Global governments spend over USD500 billion per year to artificially reduce domestic prices for oil, gas and coal products (more than five times the allocation to the Green Climate Fund), and thus fossil fuel subsidy reform (FFSR) is an important strategy both for reducing carbon emissions from transport and re-allocating financial resources to more balanced mobility strategies. On COP21 Leaders Day, Prime Ministers from New Zealand, the Netherlands, Norway, Mexico, and Denmark, along with the Friends of Fossil Fuel Subsidy Reform, formally presented the [Fossil Fuel Subsidy Reform Communiqué](#) to Christiana Figueres of the UNFCCC and the French COP21 leadership.

The Friends group, which includes Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden and Switzerland, was formed in June 2010 to support G20 and APEC leaders' commitments to phase out inefficient fossil fuel subsidies as soon as possible, with maximum ambition and transparency. The Communiqué has formed a network including some 30 countries (along with hundreds of businesses and organizations to call on the international community to combat climate change through accelerating the elimination of fossil-fuel subsidies).

The speakers noted that FFSR does not benefit the poor, but rather the middle classes, and that their countries would encourage others to join and would continue their support to push this forward. In reality many developing countries spend more on subsidizing fossil fuel than they do on education or health, clearly distorting the market. Over time this could have a significant impact for transport, it will help shift policies and programs away from fossil fuel use for transport, release money for developing low carbon options, among other positive consequences.

In a separate Monday event on carbon pricing 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 according to their own needs and capacity to bring this on board, 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,' and the impact on the transport sector if this came in within the next ten years would be significant.

The SLoCaT Partnership has produced a knowledge product entitled [A Systematic Approach for the Use of Climate Finance for Sustainable Transport](#) a discussion paper intended to identify how

scarce International Climate Finance (ICF) can be systematically used to significantly scale-up sustainable, low-carbon transport infrastructure and services.

At the end of COP21, a scorecard will be used to determine whether Paris progresses or plunges in each of the above six areas.

Train to Paris

After their announcement a year ago in Lima, the [UIC Trains to Paris](#) have arrived at the station, which have carried negotiators and other participants from as far as Beijing (as well as Lisbon, Edinburgh, and Milan, among other origins) to discuss sustainable transport en route to COP21. The SLoCaT Partnership was represented on trains from Rotterdam (Cornie Huizenga) and Brussels (Heather Allen), which led to an event at UIC headquarters, which included a video message from Secretary General Ban Ki-moon. The event also saw the formal adoption of the UIC's Railway Climate Responsibility Pledge, which calls for action by member railways to reduce carbon intensity, stimulate modal shift, actively communicate, and report performance.

Transport Champions of the Day

Throughout COP21, SLoCaT daily reports will highlight 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

With an ambitious target to reduce economy wide emissions to 35% below 1990 levels by 2030, Azerbaijan has proposed tangible transport sector measures to cope with this level of reduction, especially key following an increase of transport emissions share of 41% from 2005 to 2010.

Azerbaijan's INDC outlines the 'use of environmentally friendly forms of transport' and gives details on 'enhancing the use of electric vehicles (including railways) for public transport' along with improving and expanding its 'intellectual transport management system'. Azerbaijan also plans to shift to make a more prominent shift to metro transport, and to 'eliminate traffic jams through construction of road junctions and underground and surface pedestrian crossings'.

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

Transport Initiative of the Day

Inspired by the call to action by Secretary General Ban Ki-moon in September 2014 and followed up by the Lima Paris Action Agenda (LPAA) [15 transport initiatives](#) were developed by non-State

actors in the transport sector that are showcased during COP21. These 15 initiatives include both passenger and freight transport and touch on all transport sectors and modes: from roads to rail, from air to waterborne transport, and from motorized vehicles to cycling. They address both mitigation of, and adaptation to, climate change.

During COP 21 we will be introducing one transport initiative at every daily report. In line with the Train to Paris, we would like to start with The Low Carbon Rail Transport Challenge by the International Union of Railways (UIC). Under the motto of “on the low carbon track”, UIC combines commitments of 240 railway companies in 95 countries to reduce final energy consumption and CO2 emissions from train operations by 50% by 2030, with increasingly ambitious targets for 2050. This will save 1 Gigga tone of CO2. The per passenger kilometer carbon emission for every dollar invested in rail transport is 100 times lower than if that dollar was spent on road transport.

To advance and strengthen this commitment, CEOs from over 70 railway companies, representing the majority of worldwide passenger and freight rail activity, have signed up to company level commitments. UIC also commits to annual reporting of progress with third party verification of data; a global register of modal shift projects for members; and a rail based energy efficiency roadmap for 2030 & 2050.

For more information on The Low Carbon Rail Transport Challenge, please see the [UIC Low Carbon Rail Transport Challenge Action Plan](#).

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.

During the 12 days of the COP we will take the readers of the SLoCaT Daily Reports on a trip around the world and share some of the climate actions that have been developed as part of the 80 Days campaign.



First stop. France. Paris. November 30, 2015

Alstom's New Ambition for Rail Energy Efficiency



Alstom is currently developing entirely new types of fuel cell trains. The train will be completely emission-free and its noise level will be drastically reduced. These emission free trains are regional trains replacing diesel trains. In 2014 and 2015, Alstom signed Letters of Intent with German Länder of Hesse, Lower Saxony, North Rhine-Westphalia, Baden-Württemberg, and the Calw district for the use of a new generation of emission-free trains equipped with fuel cell drives.

The full TCA is available [here](#).

Closing Thoughts

In the opening day Leaders' Event, virtually all heads of state emphasized the urgency and timeliness of action towards climate change and have expressed this boldly (per Mohammed VI, King of Morocco the impacts are "heard even by the deaf"). United States President Barack Obama quoted Martin Luther King Jr. in saying, "There is such a thing that is being too late," saying that hour is almost upon us. However, while forests, water and natural resources take up

most of what was said, transport is not frequently mentioned among in the statements on concrete action.

Thus, the challenge remains to the sustainable transport community to make our voices heard amidst the rising din of the COP21 negotiations. 'We Are Transport,' and we must act together to give the sector the urgency and attention it deserves for climate change mitigation and adaptation. Ambitious action on transport and climate change is feasible now!

Announcements and Upcoming Transport Events

The SLoCaT Partnership would like to invite interested parties to attend the Clean Mobility Reception Thursday December 3rd, organized by the Paris Process on Mobility and Climate Change (PPMC). If you would like to join the Clean Mobility Reception, kindly contact Talya Enriquez Romano at Talya.enriquezromano@slocatpartnership.org.

Other forthcoming transport-related events include the following:

- "Shipping as part of the climate solution." Organized by The International Chamber of Shipping & Armateurs de France & the Norwegian Shipowners' Association. (December 1, 10:00-14:00, Centre Pompidou). [More](#)
- "Linking ambition to action- Success factors for low carbon development pathways in transport sectors." Organized by the Transport Research Foundation (TRF) and Institute for Transportation and Development Policy (ITDP). (December 1, 16:45 – 18:15, Rm 4, Le Bourget). [More](#)

Please visit the PPMC [Transport Events at COP21](#) website for a full listing of forthcoming transport events.

In addition, we would like to invite you all 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 the <http://ppmc-cop21.org/common-messages/>.

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