TRANSPORT @COP22 MARRAKECH
AFTER “COP OF ACTION,” TRANSPORT PREPARED TO ACT
FINAL REPORT
TRANSPORT @ COP 22 MARRAKECH

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FINAL REPORT

Partnership on Sustainable Low Carbon Transport (SLoCaT)

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<td>2DS</td>
<td>2 Degree Celsius Scenario</td>
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<tr>
<td>APA</td>
<td>Ad Hoc Working Group on the Paris Agreement</td>
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<td>AR6</td>
<td>Sixth Assessment Report</td>
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<td>BAU</td>
<td>Business-as-usual</td>
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<td>CBIT</td>
<td>Capacity Building Initiative for Transparency</td>
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<td>CEM-EVI</td>
<td>Clean Energy Ministerial Electric Vehicles Initiative</td>
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<tr>
<td>COP</td>
<td>Conference of the Parties</td>
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<td>CTCN</td>
<td>The Climate Technology Centre and Network</td>
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<td>ECLF</td>
<td>European Cycle Logistics Federation</td>
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<td>EU-ETS</td>
<td>EU Emissions Trading System</td>
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<td>GCA</td>
<td>Global Climate Action</td>
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<td>GCAA</td>
<td>Global Climate Action Agenda</td>
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<td>GCF</td>
<td>Green Climate Fund</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>GMBM</td>
<td>Global Market-Based Measure</td>
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<td>Gt</td>
<td>Gigatonnes</td>
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<td>ICAO</td>
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<td>ICLEI</td>
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<td>MPGCA</td>
<td>Marrakech Partnership for Global Climate Action</td>
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<td>NAZCA</td>
<td>Non-State Actor Zone for Climate Action</td>
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<td>NDC</td>
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<td>PPMC</td>
<td>Paris Process on Mobility and Climate</td>
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<td>SBI</td>
<td>Subsidiary Body on Implementation</td>
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<td>SCF</td>
<td>Standing Committee on Finance</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>SEI</td>
<td>Stockholm Environment Institute</td>
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<td>SIDS</td>
<td>Small Island Developing States</td>
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<td>SLoCaT</td>
<td>Partnership on Sustainable, Low Carbon Transport</td>
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<td>TAPs</td>
<td>Technology Action Plans</td>
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<td>TEC</td>
<td>Technology Executive Committee</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>WBCSD</td>
<td>World Business Council for Sustainable Development</td>
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Summary

Against the colorful and historic background of Marrakech, Morocco, COP22 aimed to be the ‘COP of action.’

On one hand, expectations for COP22 Marrakech were relatively low, after the groundbreaking global agreement emerging from COP21 Paris. On the other hand, the need to translate the political consensus of COP21 into tangible steps toward implementation of the Paris Agreement has never been more urgent. With the rate of global temperature increase exceeding most climate models, with political shockwaves from the United States threatening to disrupt progress in pre-2020 action on climate change, and with a pressing need for agreement on the rulebook for the Paris Agreement, COP22 had a high bar to clear for producing actionable outcomes.

We feel that the transport sector is responding to this call to action, and as a result of efforts over the past years, there was an unprecedented presence of transport at COP22. We were able to build bridges to other sectors in Marrakech, which is key to decarbonizing the transport sector. We feel empowered by the positive reception of our proposals for pre-2020 action alongside longer-term action, as well as the broad support for our call for inclusion of adaptation on more equal terms with mitigation.

Further action on Transport and Climate Change will benefit greatly from the “Marrakech Action Proclamation for our Climate and Sustainable Development”1 that was adopted by the Heads of State and Government meeting in Marrakech and that calls on all non-state actors to join us for immediate and ambitious action and mobilization, building on their, important achievements” as well as the “Marrakech Partnership for Global Climate Action”2 (MPGCA) launched at COP22, which outlines a more sustained and meaningful engagement of non-State actors in the UNFCCC process.

The number of transport events3 at COP22 was unprecedented, with 14 transport-focused events held on 11 November alone, in addition to the Global Climate Action Agenda (GCAA) Transport Action Thematic Day on 12 November, and the fourth annual full-day Transport Day4 on 13 November. Overall, the action orientation of the discussions on transport, as well as in other thematic areas, was clear in the fact that official and side events at COP22 were notably more granular and involved more detailed discussions on implementation than in previous COPs.

In addition, new sector-spanning partnerships are being launched, including the NDC Partnership5, the Clean Energy Ministerial Electric Vehicles Initiative (CEM-EVI)6, in addition to the SLoCaT-initiated COP22 Declaration on Accelerated Action on Adaptation in Transport7, which was presented to the UNFCCC Executive Secretary on the penultimate day of COP22. By ‘connecting the dots’ with other thematic areas and actors through the strong framework of the now-completed GCAA and the emergent MPGCA, transport is taking initial steps toward a suite of long-term actions that have the potential for transformational change.

During the course of COP22, in accordance with the political priorities of the incoming Moroccan Presidency, SLoCaT also highlighted the key role of women in advancing sustainable transport. Women are poised to become the catalysts of global transformation, as evidenced by an increasing number of women in leadership positions at COP22. Especially since women are often more dependent on more sustainable forms of transport, increasing transport accessibility for women will be a crucial component of reaching the 2DS by 2050 in an inclusive manner.

SLoCaT has also highlighted sustainable transport needs and achievements in Africa, as highlighted as a priority by the High-Level Climate Champions. SLoCaT organized and participated in Africa-focused events with the Moroccan Ministry of Equipment and Transport and the World Bank, and dedicated both a plenary and breakout session to the region during Transport Day. Mohamed Boussaid, Minister of Transport, Morocco, noted that “For a growing region like Africa which is heavily impacted by climate change we need affordable and locally appropriate transport solutions that support economic and social development, provide access to mobility, and create local value. Through the new African Association for Sustainable Road Transport launched by Morocco at COP22, we want to catalyze the development of resilient and intelligent highway infrastructure and the deployment of e-mobility in Morocco and beyond.”

In the course of COP22, a number of key outcomes emerged of particular relevance to the transport sector, which will help to determine the way forward by putting the well-intentioned words of COP22 into sustained and meaningful action on sustainable low carbon transport.

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2 http://unfccc.int/files/paris_agreement/application/pdf/marrakech_partnership_for_global_climate_action.pdf
3 http://www.ppmc-transport.org/sustainable-transport-events-at-cop22/
4 http://www.ppmc-transport.org/transportdaymarrakech/
5 http://www.ndcpartnership.org/
6 http://www.cleanenergyministerial.org/Our-Work/Initiatives/Electric-Vehicles
• Establishing a more central position for transport in UNFCCC process
Following COP22, the transport sector finds itself in a much stronger position than ever before. Transport was centrally integrated into COP22 Marrakech as one of eight thematic areas under the Global Climate Action Agenda (GCAA), which will continue until 2020 as the Marrakech Partnership for Global Climate Action (MPGCA). The Paris Process on Mobility and Climate (PPMC) has actively contributed to the development of the MPGCA and because of this has emerged from COP22 as a key strategic partner for the MPGCA. We will now be able to undertake activities on Transport and Climate Change, under the umbrella of the MPGCA, throughout the year including through regional activities and a more pro-active engagement in the May session of the UNFCCC in Bonn.

• Strengthening the position of adaptation in UNFCCC process
Adaptation has continued to gain a stronger position in general in UNFCCC, this especially through the Moroccan leadership, and the COP22 Declaration on Accelerated Action on Transport Adaptation puts the transport sector in a position of strength to follow-up throughout 2017 with a series of actions that can result in a better balance between action on mitigation and adaptation in the transport sector and enhances the relevance of our work to vulnerable and developing countries.

• Embracing action by non-State actors
Another key outcome document of COP22 is the Marrakech Action Proclamation (MAP), which gained unanimous support among Parties. While the MAP notes that “Our climate is warming at an alarming and unprecedented rate and we have an urgent duty to respond,” it also reinforces the irreversible momentum toward climate action, stating, “We, collectively, call on all non-state actors to join us for immediate and ambitious action and mobilization,” offering a clear mandate to the transport community. The complementary MPGCA puts all climate action under one flag, by noting that “coalitions of thousands of cities, regions, companies and investors from across the world announced voluntary commitments to support the implementation of the ambitious climate action.” Transport through the PPMC, which represents close to 200 organizations from a wide range of constituencies, is well placed to deliver on the suggested vertical and horizontal integration of actors and actions.

• Establishing medium- and long-term pathways to decarbonization
Three critical timeframes for climate action emerged from discussions in COP22: 2018, which will bring the first full facilitative dialogue to raise mitigation ambition in Nationally Determined Contributions (NDCs) and inform the ongoing global stocktakes; 2030, an essential medium-term deadline to assess results of action on both the Paris Agreement and the Sustainable Development Goals; and 2050, a longer-term deadline to achieve real progress toward sectoral decarbonization. The transport sector is well positioned to support these three milestones through the GCAA Transport Initiatives, the Quick Wins on Transport, Climate Change and Sustainable Development and the Global Macro-Roadmap on the Decarbonization of Transport.

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8 http://unfccc.int/files/paris_agreement/application/pdf/marrakech_partnership_for_global_climate_action.pdf
9 http://www.ppmc-transport.org
12 http://www.ppmc-transport.org/transportinitiatives/
• **Reinforcing the centrality of NDCs in the UNFCCC process**
  At COP22, the centrality of NDCs was more firmly established, with profound implications for the transport sector. In less than a year since COP21, the “intended” contributions of INDCs have become solidified as NDCs, the main mechanism to communicate and implement the Paris Agreement. The main goals at present are how to operationalize strategies contained in current NDCs, and how to take action by 2018 to scale up future iterations of NDCs, which will be supported by emerging political and technical initiatives like the NDC Partnership.

• **Developing groundwork in facilitative dialogue for more ambitious action**
  Marrakech saw the initial discussions to define the 2018 facilitative dialogue intended to assess progress toward current NDCs and to raise ambition in future 2020 NDCs. The 2016 facilitative dialogue convened high-level policy discussions on topics such as pre-2020 mitigation ambition, Paris Agreement means of implementation, capacity building and transparency, technology development and transfer, and adaptation finance. These discussions will help shape the 2018 facilitative dialogue and forthcoming global stocktakes. Through an emphasis on increased ambition, the facilitative dialogue and global stocktake provide the transport sector with a well positioned platform (a) to communicate its ongoing and planned knowledge products on mitigation and adaptation in the transport sector and (b) to facilitate countries to reflect support for Quick Wins and the Global Macro-Roadmap.

• **Incorporating action on international aviation and maritime emissions within overall action on climate change**
  The landmark decision by the International Civil Aviation Organisation (ICAO) to adopt a Global Market-Based Measure (GMBM) to address international aviation emissions in the post 2020 period and is a key step forward to accelerate climate action. Similarly, ambitious action is now required for international maritime emissions. While international aviation and maritime related emissions are not regulated under the UNFCCC, actions from ICAO and IMO to limit or reduce these emissions can complement the ambition set forth by the Paris Agreement. They are an important anthropogenic source of carbon emissions and it is important that sector-wide approaches like the Quick Wins and Global Macro-Roadmap undertaken by multi-stakeholder initiatives like PPMC take these international and domestic emissions into account and make them part of further roadmap iterations.
Introduction

One year after COP21 in Paris, the global sustainable transport community is increasingly well positioned to scale up action and move the sector onto a long-term pathway towards net zero-emission mobility and greater action on adaptation. The outcomes described in this report confirm that COP22 has lived up to its billing as the ‘COP of action,’ making the important observation that ‘action’ is not limited to infrastructure investments and putting shovels in the ground.

In the following sections, we further investigate the implications of Marrakech for transport (in the context of official negotiations, the Global Climate Action Agenda, and official and unofficial side events, including the PPMC Transport Day) through the lens of four areas that we have covered in daily reports throughout COP2215: Transport & Mitigation; Transport & Adaptation; Financing, Capacity Building and Technology in the Transport Sector; and Transport in the Global Climate Action Agenda. These areas are increasingly integrated and interconnected, adding further force to the momentum well underway toward short-, medium-, and long-term climate action for sustainable transport.

15 http://www.ppmc-transport.org/cop22-negotiations/
Transport & Mitigation

Summary of COP22 Outcomes

Mitigation is a centerpiece of the UNFCCC process, and while other areas such as adaptation and means of implementation are gaining needed attention in the process, our collective efforts on mitigation will ultimately determine whether we are successful in delivering the goals set by the Paris Agreement on Climate Change\(^\text{16}\) of keeping temperature increases to ‘well below 2°C’ above pre-industrial levels, and to aim for a temperature increase of not more than 1.5°C.

Pre-2020 ambition is a key point for Morocco and the developing world, and the need to close the gap between business-as-usual (BAU) emissions and a 2050 decarbonized emission pathway was emphasized time and time again in official negotiations, GCMA events and side events. Several of the obstacles in advancing technical discussions on the Paris Agreement rulebook stem from how the Agreement addressed issues of differentiation between developed and developing countries, and of how mitigation ambition in the pre-2020 period would be advanced. The latter issue is essential to developing countries who maintain concern about developed countries’ desire to “delay” mitigation obligations to the post-2020 era, at which point all countries are expected to make contributions to climate action.

COP22 delivered some positive news on enhanced action prior to 2020, which includes among others underscoring the urgent need for the entry into force of the Doha Amendment on emission reduction targets for developed countries for the period 2013-2020 and calls on Parties to the Kyoto Protocol to deposit their instruments of acceptance as soon as possible; taking note of the resolutions adopted at ICAO 39\(^\text{17}\) on international aviation emissions; welcoming the adoption of the Kigali Amendment\(^\text{18}\) to the Montreal Protocol to protect the ozone layer, and commending the High-Level Climate Champions and welcoming the Marrakech Partnership for Global Climate Action.\(^\text{19}\) However, despite these gains, South Africa, speaking for the BASIC countries\(^\text{20}\) in the closing plenary, again stressed the need to “give equal preference to pre-2020 issues” at the next UNFCCC session, expressing concern that these issues were not fully addressed in Marrakech.\(^\text{21}\)

The Ad Hoc Working Group on the Paris Agreement (APA)\(^\text{22}\) is in the process of developing a detailed rulebook for the implementation of the Paris Agreement, with much of the homework to be done between COP22 and COP23. Both the COP and CMA decisions set 2018 as the deadline for the rulebook, a year earlier than many envisaged in Paris, but a year later than coalitions such as the LDCs believe necessary for certain parts of the rulebook. In this respect, COP22 confirmed concerns of some observers that different interpretations of the Paris Agreement would continue to affect the speed and sequence of work on the rulebook.\(^\text{23}\)

In other APA discussions on mitigation, at least one developing country group stated its unwillingness to proceed unless the discussions capture the “full scope of the NDCs” and provide specific information on means of

\(^{16}\) http://unfccc.int/paris_agreement/items/9485.php
\(^{17}\) http://www.icao.int/Newsroom/NewsDoc2016fix/COM.68.16.EN.pdf
\(^{19}\) http://www.iisd.ca/vol12/enb12687e.html
\(^{20}\) https://en.wikipedia.org/wiki/BASIC_countries
\(^{21}\) http://www.iisd.ca/vol12/enb12687e.html
\(^{22}\) http://unfccc.int/bodies/apa/body/9199.php
\(^{23}\) http://www.iisd.ca/download/pdf/enb12689e.pdf
implementation (MOI), which includes finance, technology and capacity-building support. In addition, technical discussions under the Subsidiary Body on Implementation (SBI) on the decision of whether to have one or two public registries for countries' NDCs and the approach to adaptation communications made little progress.24

The 2016 facilitative dialogue on increased ambition was convened in two separate sessions at COP22 and covered a range of topics. Many felt that the COP22 dialogue provided important clarity on preparations for the 2018 facilitative dialogue to take stock of collective progress towards long-term emissions targets and inform the preparation of forthcoming NDC revisions. The COP requested that the outgoing and incoming COP Presidencies consult on the organization of this dialogue and report back at COP23. However, one observer noted that this year’s facilitative dialogue did little to enhance ambition and establish support, adding, “we have a lot of homework to do to figure out how to make the 2018 facilitative dialogue effective.”25

Outcome documents of COP22 include a broad range of requests for submissions from both Parties and non-state actors, which will help to guide the work of negotiators and non-state actors alike between now and COP23.26 It will be important for the transport sector to take part in these submissions and where relevant to encourage Parties to include transport perspectives in their submissions.

Coming into COP22, transport had done its homework to assess its mitigation potential and to position the sector for an increasing role in economy-wide carbon reduction. The SLoCaT Partnership has released a draft report27 projecting land transport emissions trends and mitigation potential to the year 2050, relative to the 2-degree Celsius scenario (2DS) and 1.5 degree Celsius (1.5DS) scenario targets called for in the Paris Agreement. This report extends the 2015 SLoCaT study “Emission Reduction Potential in The Transport Sector by 2030.”28 This assessment considers low-carbon policies proposed and/or investigated in 60 individual countries that have produced detailed 2050 emissions projections, which in 2010 accounted for about 89% of global land transport sector emissions, about 76% of global population, and about 84% of global GDP. The study aggregates “bottom-up” country transport CO2 estimates and considers insights from more than 450 national modeling studies. The analysis concludes that aggregating transport specific modeling efforts from individual countries suggests more rapid increases in transport emissions, especially in the 2030-2050 period, when compared with global estimates reported by the Intergovernmental Panel on Climate Change (IPCC).

Results of the analysis indicate that applying 2DS and 1.5DS targets for the transport sector requires limiting emissions to 4.7 gigatonnes (Gt) and 2 Gt, respectively, by 2050, as compared to the 13 Gt projected under BAU. By implementing low-carbon measures, it is estimated that transport emissions could be reduced to about 5 Gt (roughly 60% below BAU by 2050), exceeding the mitigation potential estimated by the IPCC Fifth Assessment Report, which estimates a reduction of 15-40% compared to baseline growth in 2050. However, while the transport sector has potential to approach a 2DS under a low-carbon scenario (LCS) (i.e. if all modeled policies are implemented), it is still likely to still fall well short of reductions required for a 1.5DS.

In the context of mitigation potential, several political entities (e.g., European Union, Germany, Mexico, and United States) have begun to produce quantified medium- to long-term pathway strategies, which describe economy-wide reduction targets for 2030-2050 and in some cases include transport-related targets (Table 1). Some of these are represented in a UNFCCC compilation of communication of long-term strategies.29

Table 1: Selected Medium- to Long-Term National Emission Reduction Strategies

<table>
<thead>
<tr>
<th>Country</th>
<th>Economy-Wide Target</th>
<th>Transport Target</th>
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<tbody>
<tr>
<td>Canada</td>
<td>30% below 2005 by 2030</td>
<td>No transport target</td>
</tr>
<tr>
<td>China</td>
<td>Reduce emissions per unit GDP by 60-65% below 2005</td>
<td>No transport target</td>
</tr>
<tr>
<td>European Union</td>
<td>80% below 1990 by 2050</td>
<td>60% below 1990 by 2050</td>
</tr>
<tr>
<td>Germany</td>
<td>85-90% below 1990 by 2050</td>
<td>40-42% below 1990 by 2030</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>45% below 2010 by 2030</td>
<td>27% below 2010 by 2030</td>
</tr>
<tr>
<td>Mexico</td>
<td>50% below 2000 by 2050</td>
<td>No direct transport target</td>
</tr>
<tr>
<td>Norway</td>
<td>30% reduction below 1990 by 2030 and carbon-neutral by 2050</td>
<td>No direct transport target</td>
</tr>
<tr>
<td>United States</td>
<td>80% or more below 2005 by 2050</td>
<td>76-86 % reduction between 2015 and 2050</td>
</tr>
</tbody>
</table>

26 An overview of all requests for submissions in 2017 can be found at: http://www.ppmc-transport.org/cop22-negotiations/
29 http://unfccc.int/focus/long-term_strategies/items/9971.php
The 2050 Climate Action Plan of Germany\textsuperscript{30}, agreed upon during COP22 caught the attention of the transport community. The announcement that Germany, which is well known for its automotive industry, is embarking on a pathway towards full decarbonization of the transport sector encouraged many to adopt a more ambitious and optimistic approach to discussing mitigation in the transport sector. This plan complements the efforts of the PPMC to develop a phased and regionally-specific global macro-roadmap\textsuperscript{31} to decarbonize the transport sector.

Ambitious action on mitigation and transport will require closer cooperation with other sectors. A wide range of discussions took place in Marrakech between the transport sector and related sectors, including energy, finance and health, both in ministerial meetings and other fora, which demand follow-ups leading up to COP23.

At COP22, developing and developed countries, along with international institutions, also launched the NDC Partnership\textsuperscript{32}, a collaborative platform to help countries embed their NDCs into all sectors and all levels of decision-making, and to further engage the private sector, encourage South-South cooperation, and make donors more responsive to countries’ needs.

The NDC Partnership is co-chaired by Morocco and Germany, funded by multilateral banks, the Global Environment Facility and UN bodies, and supported by the Danish, Dutch, and German ministries. The partnership includes 34 countries of varied development levels (e.g. Canada, Brazil, Colombia, Japan, Mexico). WRI’s Paula Caballero (who acted as the spokesperson for the Transport Sector in the November 17 High Level Event of the GCAA) will coordinate the Partnership, and SLoCaT intends to offer expertise for developing transport aspects of NDCs and to contribute data from more than 450 mitigation potential studies, through a planned searchable database.

In conjunction with the launch, the NDC Partnership unveiled the NDC Funding and Initiatives Navigator\textsuperscript{33}, a comprehensive online database of climate finance and support initiatives available for NDC implementation. The Navigator is designed to help countries identify available alternative resources for adaptation and mitigation, and to help improve coordination by showing countries’ existing bilateral NDC support engagements.

PPMC efforts to develop a long-term global macro-roadmap will find mutual benefit in the 2050 Pathway Platform\textsuperscript{34}, which was launched by the High-Level Climate Champions in the final days of COP22. This platform currently includes 51 countries, regions and cities and 196 firms and aims to support these entities in the development of their long-term decarbonization strategies.

Though not covered by the mandate of the UNFCCC, and therefore not incorporated in the scope of the Paris Agreement, international aviation and shipping were an ongoing topic of discussion at COP22. Especially international aviation was in the spotlight in many discussions following the landmark agreement reached just prior to COP22 by the International Civil Aviation Organisation (ICAO), with the adoption of a Global Market-Based Measure (GMBM) to reduce international aviation emissions. A range of presentations was made by ICAO representatives to explain the new agreement and the relevance for ambitious action on climate change. Some argued that while the agreement was a step forward, that it did not go far enough. International shipping received a less welcoming attitude in COP22, with observers expressing general disappointment that the International Maritime Organization (IMO) was not able to agree on a more constructive way forward in an important meeting that also took place immediately prior to COP22.

Various side events discussed ICAO’s comprehensive approach to achieve carbon neutral growth from 2020 through a “basket of measures”, comprising of aircraft technologies, operational improvements, sustainable alternative fuels, and the implementation of a global market-based measure (CORSIA) as a gap-filler, as well as the critical importance of capacity building and assistance for development and implementation of member States’ action plans. These side events also discussed how more ambitious reduction targets could be set for international transport emissions, in order to deal with a potential BAU situation under which international transport emissions could be greater than the whole of the European Union emissions by 2035. Some experts expressed the view that “bottom up” targets set by the sector will not be sufficient; rather this must be complemented by political decisions to drive ambition. Agreeing on long term targets in IMO and ICAO will be key according to experts and will set important signals to the private sector and investments in these sectors.

\textsuperscript{30} http://unfccc.int/files/focus/longterm_strategies/application/pdf/161114_climate_action_plan_2050_en_bf.pdf
\textsuperscript{31} http://www.ppmc-transport.org/global-road-map/
\textsuperscript{32} http://www.ndcpartnership.org/
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\textsuperscript{34} http://newsroom.unfccc.int/unfccc-newsroom/high-level-climate-champions-launch-2050-pathways-platform/
**2017 Follow-up Actions by PPMC on Mitigation**

Transport will have to play a significant role in the transition to a net-zero emission economy by 2050. The transport sector (including international aviation and maritime) will have to move from current emissions of about 7 Gt to about 2-3 Gt by 2050 instead of projected BAU emissions of 13-15 Gt. To help ensure that the transport sector makes optimal use of 2017, the PPMC will:

- **Encourage that transport quick win actions**[^35] move from promotion to implementation stage through increased involvement of 'quick win champions'; linking up with MPGCA Transport Initiatives as well as with relevant initiatives from other thematic areas under the MPGCA.

- **Expand research on medium- to long-term national transport mitigation plans** to support increased transport mitigation ambition and a more balanced set of transport strategies in second generation NDCs and medium- and long-term low greenhouse gas emission development strategies. On an interim basis, PPMC will reach out to the NDC Partnership and related initiatives on how to strengthen transport components of such partnerships.

- **Assess how to best to incorporate the transport sector in the 2018 Facilitative Dialogue.**

- **Increase PPMC involvement in the IPCC process (e.g. 1.5DS Special Report, Sixth Assessment Report (AR6)), with a goal to convene and facilitate relevant transport organizations and initiatives to develop a dedicated report on mitigation of transport in support of the 1.5DS Special Report.**

- **Continue the development of the PPMC global macro-roadmap on decarbonization of transport in concert with the 2050 Pathway Platform and other relevant initiatives. Conduct additional research on transformative policies, technologies and financing (e.g. roadmap components), as well as the impact of the roadmap on economic structure and employment.**

- **Encourage the transport sector (and Parties to the Convention) to actively participate in submissions called for by the UNFCCC on mitigation-related topics.**

[^35]: [http://www.ppmc-transport.org/quick-win-actions/]
Transport & Adaptation

Summary of COP22 Outcomes

Adaptation in the transport sector is necessary for both developed and developing countries. Transport systems worldwide are vulnerable to the increasing impacts of a changing climate and this increases the potential for catastrophic impacts. Resilient transport is important in disaster recovery. Transport systems and services are already being severely disrupted by climate related events with an ever-growing number of incidents in both the developed and developing world.

Adaptation was identified as one of four priorities by the Moroccan Presidency of COP22, which enabled the PPMC to draw more attention to adaptation and increasing resilience for transport.

In official negotiations, the COP requested the APA to address the governance and institutional arrangements, safeguards and operating modalities for the Adaptation Fund to serve the Paris Agreement, and the COP invited Parties to submit their views on these arrangements, safeguards and modalities. Noting that access to adaptation finance remains a challenge, particularly for small island developing states (SIDS) and least-developed countries (LDCs), the COP also invited Parties and other relevant institutions to consider that country-driven processes to assess adaptation needs in developing countries are fundamental in scaling up adaptation finance; that NDCs and adaptation communications represent a good opportunity for scaling up adaptation finance; and that the role of the private sector in adaptation finance must be increased.

Further, noting that strengthening national public financing systems is vital in supporting countries to effectively manage and monitor climate finance, the COP asserted that better information (including through enhanced tracking of adaptation flows) must be generated for more efficient adaptation planning, and that maximizing the effectiveness of adaptation finance is essential to ensuring that limited financial resources are leveraged for the greatest possible positive impact.

In Part One of the facilitative dialogue, it was noted that the cost of adaptation in developing countries is estimated to be at least two to three times higher than the cost of mitigation measures; thus it was stressed that finance for mitigation and adaptation should be more equally allocated, and that both aspects should be centrally reflected in NDCs, as key vehicles to deliver action on mitigation, adaptation and means of implementation for transport and other sectors. A US$80 million grant to the Adaptation Fund by Germany, Sweden, Italy and Belgian regions during COP22 nudged this needle in the right direction, but funding discrepancies remain.

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

37 http://www.iisd.ca/download/pdf/enb12689e.pdf
In just eight days the Declaration was signed by 395 individuals and by 55 organizations, including the World Bank, the International Energy Agency, the Global Environment Facility, the Islamic Development Bank, the International Road Federation, PIANC, the International Union of Railways, UN-ECE, the Nordic Development Fund, and the International Association of Public Transport. On 17th November, the PPMC leadership presented the Declaration⁴⁰ to UNFCCC Executive Secretary Patricia Espinosa (see the PPMC press release⁴¹ for more details).

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

The Dutch government and the UN Environment Programme are exploring the option of launching in 2017 a Global Centre of Excellence on Climate Adaptation, which intends to pool knowledge to help countries, communities and companies to develop and implement replicable approaches to adaptation. The Centre intends to focus its efforts on three initial areas: Water (Deltas), Agriculture, and Smart Mobility, with the objective to provide support, technical assistance and capacity building to accelerate climate adaptation across the selected themes.

The SLoCaT Partnership participated in a workshop to discuss the Centre’s mission and objectives. Next steps include further detailing of the Centre’s service lines and activities, test-running services with a selection of end-users, exploring collaborative models that span complementary initiatives, and discussing possible organizational models and the roles of potential partners. Further workshops and meetings are to be organized in the coming months.

At COP22, there was also a notable effort to discuss transport adaptation in multiple events (and not a single event, as has often been the case in previous COPs). In this context, the PPMC organized an event focused on climate adaptation in the global transport sector, with discussions focused on resilience measures for highways, railways, and ports, along with analytical work to prioritize adaptation investments. Participants pointed out that although various countries’ climate conditions, vulnerabilities and capabilities are different, all can benefit from knowledge sharing.

In addition, a World Bank-sponsored event discussed approaches to resilient low carbon transport solutions in Africa. Panelists presented outcomes of a recent report on the impact of climate change on African road systems, and described efforts to incorporate adaptation into NDCs and national road maintenance strategies, especially in rural areas. Panelists concluded that it is necessary to invest in human capacity and new technologies to increase transport resilience; to increase the portion of climate finance allocated to adaptation; and to create enabling policies for the private sector to invest in more resilient transport infrastructure.

Finally, the PPMC-sponsored Transport Day featured a breakout session on transport adaptation and resilience. Speakers noted that a Global Transport Adaptation Leadership Forum would be useful in providing adaptation with its own space; and that governments must become

better at managing risk, with economic factors not seen as an excuse, as marginal costs of adaptation are far outweighed by total costs of post disaster loss and damage when risk has been mismanaged.

**2017 Follow-up Actions by PPMC on Adaptation**

Adaptation has been viewed for many years as the poor stepchild in broader climate change policy and action, and the transport sector is no exception. It is hoped that COP22 has been a game changer in this respect, and to ensure that the momentum established during COP22 will not be lost, the PPMC proposes to undertake the following steps in 2017:

- Initiate implementation of the COP22 Declaration on Accelerated Action on Adaptation in Transport. Report on the implementation of the Declaration throughout 2017 (and beyond) as part of the regular progress reports on transport under the MPGCA. Explore options to integrate the Declaration (or elements thereof) in existing MPGCA Transport initiatives and/or create a new separate MPGCA Adaptation Initiative.

- Develop a work program on Adaptation in Transport in coordination with the core team of organizations responsible for drafting the Adaptation Declaration (e.g. IRF, UIC, PIARC, PIANC, WB). Make work program part of the discussions during May 2017 UNFCCC session in Bonn. Use work program as basis for continued discussions on possible transport component in Netherlands Center of Excellence on Adaptation.

- Support Morocco in its plans to share its experience in adaptation of highways through the creation of an African Association for Sustainable Road Transport, and contribute to transport adaptation capacity building and tool development in the region.

- Encourage PPMC member organizations and partners to accelerate efforts to make transport infrastructure, systems and services more resilient to current and future climate change, by integrating adaptation into all relevant policies or guidelines, investment decisions, infrastructure design and construction parameters, and transport operations.

- Promote increased and balanced transport adaptation strategies in second generation NDCs in outreach to NDC Partnership and other relevant NDC initiatives.

- Ensure that the adaptation component of the SLoCaT climate finance database is further developed.

- Encourage the transport sector to actively participate in submissions called for by the UNFCCC on adaptation related topics.

- Promote the integration of adaptation in transport in regional consultations on transport and climate change to be organized by the PPMC in coordination with the MPGCA.
Financing, Technology, and Capacity Building in the Transport Sector

Summary of COP22 Outcomes

A key prerequisite for putting the Paris Agreement into action is to solidify the means of implementation to finance needed emissions reduction measures and to proliferate emission reduction technologies for transport and other sectors. Following COP22, difficulties remain regarding the lack of mechanisms for prioritizing financing needs of least developed nations, the role of loss and damage, and national and local capacity building efforts.

Nevertheless, COP22 made it clear that potential solutions exist, such as increased private sector involvement, market-based mechanisms including carbon pricing, and proceeds from the global market-based measure (CORSIA) in international aviation and possible levies from fossil fuels as a secure source of finance for loss and damage. However, the details of finance flows must be made clear not only to ensure that commitments are met, but also to resolve concerns regarding transparency on financial progress. As noted in conversation by a Zambian delegate: “Without sufficient financing, all other discussions are meaningless.”

In official negotiations, the COP noted that the 2016 biennial assessment and overview of climate finance flows of the Standing Committee on Finance (SCF) highlighted the increase of climate finance flows from developed to developing country Parties; welcomed the progress by developed country Parties towards the goal of jointly mobilizing US$100 billion annually by 2020; and urged developing Parties to continue to scale up mobilized climate finance towards this goal.

Further, the COP requested that Parties continue to enhance their enabling environments to facilitate the mobilization and deployment of climate finance; and urged developed country Parties to strive for a greater balance between mitigation and adaptation finance, while emphasizing continued challenges faced by developing countries in accessing finance from public and private, bilateral and multilateral sources.42

The COP further decided that planned 2017 and 2018 in-session workshops on long-term climate finance will focus on lessons learned from translating needs identified in country-driven processes into projects, programs, policies and enabling environments for mitigation and adaptation finance. Finally the COP requested that the UNFCCC Secretariat ensure that these workshops are balanced in scope and attended by both public and private sector actors.43

In addition, the COP welcomed progress made by the Technical Executive Committee (TEC)44, the Climate Technology Centre & Network (CTCN)45 and the operating entities of the Financial Mechanism (FM) in elaborating linkages between the Technology Mechanism (TM) and the FM, and increasing engagement between the Green Climate Fund (GCF) and the CTCN, particularly with respect to the GCF’s Readiness and Preparatory Support Programme and Project Preparation Facility. The COP invited GCF nationally-designated focal points to develop further Technology Needs Assessments (TNAs) and Technology Action Plans (TAPs), and urged developing countries to submit technology-related projects, including those established via TNAs and CTCN technical assistance, to the operating entities of the FM for implementation.46 In a related development, the Climate

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42 http://www.iisd.ca/download/pdf/enb12689e.pdf
43 http://www.iisd.ca/download/pdf/enb12689e.pdf
44 http://unfccc.int/ttclear/pages/tec_home.html
45 https://www.ctc-n.org/
Vulnerable Forum of 47 developing countries made a pledge for 100% renewable energy, if such investments could be properly financed.47

Finally, the COP and others called on developed country Parties (and other Parties making voluntary financial contributions to the Global Environmental Facility (GEF)), to ensure a robust seventh replenishment, in order to provide adequate and predictable funding toward the implementation of the Paris Agreement.

Further, the COP requested that the GEF consider climate risks in all of its programs and operations (as appropriate), through lessons learned and best practices, and encouraged the GEF to encourage Parties to align their GEF programming with priorities identified in their NDCs during the replenishment, and to continue to promote synergies across key focal areas.48

Part Two of the COP22 facilitative dialogue focused on the means of implementation (MOI) for the Paris Agreement. Questions addressed in the dialogue included what actions are required to further scale up support for accelerating technology development and transfer for developing countries; how to enhance access to financial support to support climate actions in the most vulnerable countries; and what role should the UNFCCC and the established architecture for MOI have to enhance the provision and mobilization of support.

The board co-chair of the Green Climate Fund (GCF) – whose sole mandate is to promote a paradigm shift to lower emissions – noted that priorities of the GCF include financing innovative programs, scaling up known approaches, balancing allocation between adaptation and mitigation, mainstreaming full country ownership, and maximizing engagement of the private sector.

The Fund grew to US$10.3 billion in its resource mobilization period, and currently provides a total of US$1.2 billion to be implemented in 39 countries including SIDS and LDCs. GCF’s readiness program prioritizes vulnerable countries, with 56 countries receiving funding (with two thirds consisting of SIDS, LDCs and African States), and with 23 countries already in implementation stages.

The CEO and chairperson of the Global Environmental Facility (GEF) presented on the freshly-launched Capacity Building Initiative for Transparency (CBIT), which aims to strengthen institutional and technical capacities of developing countries to meet enhanced transparency requirements of the Paris Agreement before and after 2020. Parties at COP21 had requested GEF support the establishment of CBIT to strengthen institutions for transparency in accord with national priorities, and assist in improving transparency through relevant tools and training. The CBIT trust fund was launched during the dialogue, with donors committing more than US$50 million during the session, which will help inform revised NDCs and upcoming global stocktakes.

COP22 negotiations covered several additional climate finance matters through the UNFCCC Standing Committee on Finance (SCF). GCF reported a portfolio with 28% of resources dedicated to adaptation, 27% to mitigation and 45% cross-cutting these areas, demonstrating an increasingly more equitable allocation of mitigation and adaptation finance. GEF reported an allocation of US$554 million to 59 mitigation projects and US$189 million for 85 capacity-building projects, along with support for NDC preparation.

Carbon pricing has the potential to be an innovative financial measure contributing to the need for ‘economic diversification’ highlighted by COP22 President Salaheddine.

49 https://www.greenclimate.fund/home
50 https://www.thegef.org/topics/capacity-building-initiative-transparency-cbit
Mezouar. Yet despite being included as a central component of the Paris Agreement, carbon pricing did not play a prominent role in official COP22 discussions, with the deadline for submissions on rules for pricing mechanisms pushed off to March 2017.\textsuperscript{31} Carbon markets have also made little progress in transport this year, and key breakthroughs have focused on offsetting, such as ICAO’s recently announced CORSIA scheme. Some expressed concern however that offsetting cannot be relied on as a long-term solution as it may fail to encourage the same degree of innovation as pricing. In civil society input to COP22 negotiations, Climate Justice Now! stressed that reaching a 1.5DS does not allow space for offsetting mechanisms.

Participants at the PPMC-SLoCaT-sponsored Transport Day\textsuperscript{52} noted that strong support for carbon pricing exists within the sector (e.g. as noted in the opening remarks of Michelin CEO Jean Dominique Senard) but that overall opinions in the transport industry are heavily divided, which hinders concerted action. The SLoCaT Partnership maintains that carbon pricing should complement but not replace regulatory action, as loosely regulated market-based mechanisms (MBMs) can be ineffective (e.g. the EU Emissions Trading System (EU-ETS) currently suffers from an oversupply of permits).

In the private sector, the We Mean Business coalition\textsuperscript{53} has aligned 77 companies\textsuperscript{54} committed to the adoption of a carbon price, including industry leaders such as Coca Cola, Carrefour, BT Group and Unilever. On a related note, during COP22, Moroccan banks issued three green bonds with a total valuation of EUR 350 million to finance renewables, reflecting a growing determination to leverage alternate finance mechanisms in the absence of clear market signals.\textsuperscript{55} However, the APA concluded its COP22 sessions without real progress on pricing.

Technological innovations in transport and other sectors were on full display at COP22, which both offer promise in making progress toward emissions targets and reveal limitations in achieving broader sustainable development objectives.

The COP22 Low Emissions Solutions Conference, organized by the Government of Morocco, the UN Sustainable Development Solutions Network, the World Business Council on Sustainable Development and ICLEI – Local Governments for Sustainability, brought together technical experts and innovators from business and academia to set common technological trajectories for a decarbonized economy. The three-day event included presentations by a range of private sector actors in transport that focus on reducing GHG emissions from mostly private vehicles, through electric- and hydrogen-powered cars, as well as biofuels and other approaches.

During COP22, eight major nations (Canada, China, France, Japan, Norway, Sweden, the United Kingdom and the United States) signed a pledge to increase the share of electric vehicles in their government fleets. The Declaration was developed under the aegis of the Clean Energy Ministerial Electric Vehicles Initiative (CEM-EVI),\textsuperscript{56} and aims at encouraging non-state actors, such as cities, regional and state governments, and companies, to accelerate the adoption of clean vehicles in their transit bus and taxi fleets, as well as municipal and corporate fleets. With the signing of the declaration, these governments will also help create economies of scale and set an example for other countries to follow. The full text of the Declaration is available here\textsuperscript{57}.

Technology advances are also a key component of increasing the efficiency of freight transport, a sector that currently emits 7% of global CO2 emissions, a share that is projected to grow to 16% by 2050. Yet, despite its potential emissions impact, freight transport is represented in only 13% of the 160 NDCs submitted to date. Like adaptation, freight transport was also represented in multiple events during COP22.

An event organized by the European Cycle Logistics Federation (ECLF) discussed the potential for cycle transport to be incorporated into freight pathways; for example, in the European Union, half of all motorized goods transport in cities could be shifted to cargo bikes. Further, modal integration was noted as an important efficiency criterion; in Switzerland, cycle freight is coordinated with inter-city rail transport, so cycle couriers can collect goods directly from train depots.

A complementary event on strengthening the focus on freight transport in the climate agenda organized by the UN Conference on Trade and Development (UNCTAD) presented another opportunity to increase the focus on freight GHG emissions. East Africa presented a comprehensive program to improve freight with environmental, economic and health benefits for the whole region. While the full decarbonization of freight should be maintained as a long-term goal, short-term efficiency can be optimized through the use of ICT solutions and asset sharing.

The combined emissions of the maritime and aviation sectors are predicted to grow by over 250% by 2050 under a BAU scenario, thus providing at least as significant a climate challenge as road freight, and the share of “all cargo” flights is likewise increasing due to the drive of e-commerce. ICAO will address aviation emissions through a carbon offsetting and reduction scheme, applied equally to passenger and cargo flights, which will be mandatory for the majority of countries from 2027; while 66 countries representing 86.5% of international aviation traffic already announced their voluntary participation in the scheme from its outset in 2021. The IMO expects to adopt a long-term strategy in 2018, which should include short, medium and long term measures by

\textsuperscript{51} http://www.perspectives.cc/fileadmin/Reports/COP22_outcome11-16.pdf
\textsuperscript{52} http://www.ppmc-transport.org/transportdaymarrakech/
\textsuperscript{53} http://www.wemeanbusinesscoalition.org
\textsuperscript{54} http://www.wemeanbusinesscoalition.org/take-action/put-price-carbon
\textsuperscript{55} http://www.perspectives.cc/fileadmin/Reports/COP22_outcome11-16.pdf
\textsuperscript{56} http://www.cleanenergyministerial.org/Our-Work/Initiatives/Electric-Vehicles
\textsuperscript{57} http://www.iea.org/media/topics/transport/EVI_Government_Fleet_Declaration.pdf
2023; however, the speed of decarbonization in the sector is not keeping pace with required ambition levels. ICAO and especially IMO must promote further technological innovation to ensure that the mitigation potential of aviation and maritime transport is fully realized.

While technology is an essential component of the Avoid-Shift-Improve approach towards sustainable transport development, it is not a universal solution, as electric cars will not solve issues like road congestion and road safety, and cannot ensure affordable and accessible transport for all. Therefore, while technological improvements in private vehicles are a key part of the solution, they should not be the sole focus of the transport community in creating sustainable transport systems, as health, safety, accessibility and other co-benefits must also be considered.

2017 Follow-up Actions by PPMC on Financing, Technology and Capacity Building

Effective action on mitigation and adaptation in the transport sector will require a substantive strengthening of the Means of Implementation as defined in the Paris Agreement: including finance, technology, and capacity building. Some of the barriers to making progress in these three areas are political and therefore outside the scope of the PPMC, but progress can be made through these follow-up actions in 2017:

- Continue 2014-2015 SLoCaT analytical work\(^{58}\) on the role of climate finance in accelerating action on low carbon transport. Ensure that promotion of ambitious, transformative transport policies go hand in hand with development of innovative financing options to overcome financial barriers.
- Develop new approaches to offsetting (including, but not limited to aviation), and seek breakthroughs in mobilizing private sector funding, possibly leveraged by a greater use of climate finance. Institutionalize dialogue with private sectors CEOs as well as transport ministers, initiated during COP22, as a standing element of the Global Climate Action Agenda during annual COPs.
- Increase engagement of the transport sector in technology-related mechanisms under the UNFCCC (i.e. via the TEC and CTCN), also by linking up with discussions on technology pathways in support of the Global Macro-Roadmap on Decarbonizing Transport.
- Increase efforts to build capacity to support transport-related NDC implementation needs by better documentation of capacity building efforts by PPMC member organizations and partners. Ensure that these organizations are well connected with NDC supporting partnerships such as the NDC and the LEDS Partnerships.
- Encourage the transport sector to actively participate in submissions called for by the UNFCCC on means of implementation (e.g. finance, technology, and capacity building) related topics.

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Summary of COP22 Outcomes

Since 2014, climate action by non-state actors (e.g., companies, cities, civil society) has been increasingly present at the COPs. Non-state actors benefited greatly from the efforts of Secretary General Ban Ki-moon’s Climate Summit in September 2014, which resulted in an initial mobilization of non-state actors in a series of voluntary commitments. This was followed by the setting up of the Lima Paris Action Agenda (LPAA), which helped to bring non-state actors more centrally into the UNFCCC process.

The big step forward was at COP21 in Paris in 2015, as the Paris Agreement explicitly recognizes and encourages action by non-state actors. The appointment in 2016 of two High-Level Climate Champions at COP22 has helped foster and shape a constantly growing range of climate action by non-state actors as part of the Global Climate Action Agenda (GCAA), the successor to the LPAA.

Transport has been well represented in action by non-state actors from the start, initially facilitated by the SLoCaT Partnership and later by the PPMC. An overview of the transport initiatives under the GCAA can be found at http://www.ppmc-transport.org/transportinitiatives.

At COP22 a significant amount of time in the UNFCCC agenda was given to each of nine thematic action areas, with the Climate Action – Transport Thematic day\(^{59}\) taking place on 12 November. This was followed by a significant High Level Event on Accelerating Climate Action on 17 November, the penultimate day of the conference, which established a clear framework for co-operation between state and non-state actors until 2020 on mitigation and adaptation, greatly reinforcing the links between non-state climate action and the formal UNFCCC processes.

PPMC and SLoCaT were invited (in co-ordination with the French and Moroccan governments) to facilitate the Global Climate Action - Transport activities at COP22 to convene sustainable transport leaders to catalyze necessary sectoral transformations. SLoCaT and PPMC demonstrated that the transport sector is increasingly well organized and that tackling emissions from transport is both feasible and cost effective by illustrating (a) how progress\(^{60}\) has been made on the 15 GCAA transport initiatives covering all transport modes and over 100 countries, and (b) how these initiatives can be used as a springboard for more comprehensive short term action (e.g. through transport Quick Wins) and medium to long term action (e.g. through the Global Macro-Roadmap on decarbonization of the transport sector).

To kick off the thematic events on Transport, PPMC held a press conference (on demand web stream available here\(^{61}\)) with five high-level speakers, and simultaneously published a press release\(^{62}\) on transport action.

The GCAA Transport Showcase and Dialogue Events\(^{63}\) on 12 November showed that the implementation of transport-related aspects of NDCs can benefit from the experience and geographic breadth of a wide range of initiatives which are increasingly demonstrating they are able to kick start...
and scale up transformative action. The UNFCCC prepared a 3-minute video describing Climate Action on Transport that is available here.64

The Transport Showcase was a chance to present progress on the GCAA transport initiatives since COP21. The first session on scaled up implementation included brief presentations on the Global Fuel Economy Initiative, Mobilize Your City, Aviation Climate Action Takes Off and Global Green Freight, as well as contributions from the UITP Declaration on Climate Change Leadership, Airport Carbon Accreditation Initiative and the World Cycling Alliance and European Cycling Federation Commitment. The session on electric mobility and Zero Emissions Vehicles provided a platform for the ZEV Alliance, the Urban Electro Mobility Initiative and ITS for Climate. A surprise intervention by Prince Albert of Monaco was included in this part of the program.

The session on adaptation allowed UIC to present their work on the Low Carbon Sustainable Rail Transport Challenge and allowed participants to learn about Morocco’s plans for a new regional sustainable road transport initiative covering adaptation issues. This part of the program offered an opportunity to introduce the SLoCaT-PPMC COP22 Declaration on Accelerated Action on Adaptation in the Transport Sector and gather additional support for the Declaration.

A comprehensive action framework to kick-start the transformation of transport and limit the lock-in effects of a high-carbon BAU scenario in the sector was also presented as a series of pre-2020 “quick win actions”66 that span policy, regulatory and operational solutions for both human mobility and freight movement. Quick wins can feed into a phased, regionally-specific Global Macro Roadmap67 that links policy, investment, behavior, and technology which is currently under development with the goal to put transport onto a path to decarbonization early in the second half of the century, while strengthening short- and medium-term adaptation efforts.

The following Transport Dialogue event was more focused on the necessary transformation of the transport sector to meet emission reduction targets and included speakers with a national or international role as well as actors from the financial sector. A call to action was launched to foster new initiatives to bridge gaps in areas which are not yet well covered but are essential for the successful transformation of the transport sector (e.g. renewable energy, carbon pricing).

To build on the spirit of non-State action in the GCAA, PPMC convened a Transport CEO Roundtable to increase private sector involvement in long-term strategic discussions on sustainable transport on 11 November. The Paris Agreement specifically calls for a broader role for industry to support implementation, as public funding to scale up low carbon transport solutions will be insufficient to achieve a “net-zero emission” economy consistent with a 1.5DS.

The primary objective of the Transport CEO Roundtable was to determine how the private sector and the GCAA Transport team can engage in further development of the proposed PPMC Global Macro Roadmap68 as an actionable vision of transport decarbonization. The Roundtable was chaired by Jean Dominique Senard, CEO, Michelin, and was attended by participants from national and international transport

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64 https://www.youtube.com/watch?v=s6NJo_q2US0&feature=youtu.be
66 http://www.ppmc-transport.org/quick-win-actions/
68 http://www.ppmc-transport.org/global-road-map/
companies, private sector organizations (e.g. World Business Council on Sustainable Development, World Economic Forum, We Mean Business, Carbon Disclosure Project, UN Global Compact) and modal transport sectors (e.g. European Cycling Federation, International Union of Railways, International Association of Public Transport).

Several major outputs emerged from the CEO Roundtable. First, the business sector is willing to step up to help decision makers implement pre-2020 actions to kick-start the transformation of the transport sector, with business leaders highlighting the need to create incentives for innovation and to generate adequate funding to realize these innovations. Second, a broad consensus has emerged within the business sector to actively support the Global Macro Roadmap concept, as a guiding concept for the transformation of the transport sector and as a holistic framework to be enriched in further discussions. Third, several outstanding issues must be addressed, which include strengthening linkages to NDCs, increasing focus on demand-side measures, improving synergy with the energy sector, and expanding climate finance for transport.

A Transport Ministerial Roundtable to discuss policy options that will support the achievement of the Paris Agreement was also convened during COP22, which was chaired by the Moroccan Ministry of Transport, and co-organized by the GCAA Transport Team (Paris Process on Mobility and Climate, Energy Investment Company SE Morocco, and the Ministries of Environment of Morocco and France), with the collaboration of the International Transport Forum. Event participants included transport ministers from the Republic of Guinea, Morocco and Mozambique, with the participation of senior ministry officials from France, Finland and the European Commission who highlighted respective transport achievements and plans.

Major outputs of this ministerial session include overall support of participating countries, who agreed that the eight priorities of the Roadmap are highly relevant, and that they should include an emphasis on infrastructure financing. There was also a strong interest in adaptation and regionally specific timetables. Finally, there was recognition among ministers that some countries may be able to leapfrog to new levels of development of their sustainable transport systems.

The CEO Roundtable and the Ministerial Session converged on messages also used as inputs to high-level discussions on 17 November. Regional discussions to achieve wider endorsement are to take place in 2017 under the coordination of the PPMC, with transport and finance experts and governments, and the next milestone will come at COP23, when the Roadmap is expected to be complete and ready for use as a “backbone document” for the transport sector.

The COP22 innovation of having a Transport CEO Roundtable and a Transport Ministers’ Roundtable has helped build momentum and create more connections within the transport sector. It is hoped that these events will become a permanent feature of the annual COP schedule with UNFCCC taking a more proactive role in facilitating such thematic or sector oriented discussions.

The last GCAA activity at COP22 was the High Level Event on Accelerating Climate Action69 held on the penultimate day of the conference, which included addresses by the past, current and future COP Presidents. In his address the Prime Minister of Fiji who will preside over COP23 announced the appointment of Inia Seruiratu, Minister for Agriculture, Rural & Maritime Development & National Disaster Management as the new High-Level Climate Champion to replace the outgoing French Champion Laurence Tubiana. The high-level participation of France, Morocco and Fiji in this event, which will be repeated at future COPs, helped build momentum on climate action and bodes well for the necessary work in the next years.

The primary objective of the event was to provide an opportunity for the work of each of the thematic areas to be presented. The transport sector was represented by Paula Caballero, Global Director, Climate Program, World Resources Institute, who delivered a five-minute speech on behalf of the Climate Action – Transport community. A short report70 describing the outcomes of the Climate Action – Transport Thematic events was also forwarded to the High Level Event.

The High Level Event was also used by the High Level Champions Lauren Tubiana and Hakima El Haité to present the “Marrakech Partnership for Global Climate Action”71, which outlines how non-state actors will be engaged in the UNFCCC process in the coming years. It is important to consider the MPGCA together with the “Marrakech Action Proclamation for our Climate and Sustainable Development”72 that was adopted by the Heads of State and Government meeting in Marrakech and which calls on “all non-state actors to join [the UNFCCC] for immediate and ambitious action and mobilization, building on their, important achievements” and which references the MPGCA73.

The MPGCA covers both mitigation and adaptation issues, and sets out a strong framework for enhanced co-operation between state and non-state actors as well as the integration of climate actions with the formal UNFCCC processes and bodies up until 2020. Inter alia the MPGCA addresses integration of non-state initiatives into the formal UNFCCC process through:

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69 http://climateaction.unfccc.int/event-calendar/events/cop22-gca-hle/
70 http://climateaction.unfccc.int/media/10976-cop-22_gca_transport-report.pdf
71 http://unfccc.int/files/paris_agreement/application/pdf/marrakech_partnership_for_global_climate_action.pdf
73 http://unfccc.int/files/paris_agreement/application/pdf/marrakech_partnership_for_global_climate_action.pdf
• Preparing annual reports on climate action;
• Reporting on achievements and options to enhance action to the COPs;
• Increasing alignment of non-state action with UNFCCC bodies, institutions, events and processes such as Technical Expert Meetings, the LDC Expert Group, and the Adaptation Committee;
• Convening an annual High Level Event on Climate Action at future COPs; and
• Bringing state and non-state actors together to enhance collaboration.

The MPGCA also aims to strengthen and scale up non-state initiatives through:
• Showcasing success and providing a platform for new initiatives and greater ambition;
• Tracking initiatives through the enhanced NAZCA portal;
• Enhancing linkages to the SDGs;
• Increasing support for non-state action and the climate champions through the UNFCCC secretariat; and
• Providing a clear program of work throughout the year.

COP22 was a significant step forward as it clearly supported the importance of non-state action through the MPGCA. This major progress at COP22 on non-state action means that as we enter 2017, the transport sector can benefit from an agreed framework to scale up climate action and enhance mechanisms for interacting with the formal UNFCCC process. There is a significant opportunity now to mainstream climate action on transport in order to deliver the Paris Agreement objectives among UNFCCC Parties.

The MPGCA is a major step forward for non-state climate action. It institutionalizes the role of non-state climate action in the UNFCCC process and includes many of the ideas presented by the transport sector at the Global Alliances and Coalitions event in June 2016 in Rabat and the recommendations made in response to the Climate Champions consultation in August 2016. No longer is climate action limited to a small role in the Bonn sessions and the annual COP – the MPGCA now provides a year-long agenda for scaling up and expanding non-state action.

2017 Follow-up Actions by PPMC on Transport in the Global Climate Action Agenda

COP22 was a significant step forward as it clearly supported the importance of non-state action through the MPGCA. This major progress at COP22 on non-state action means that as we enter 2017, the transport sector can benefit from an agreed framework to scale up climate action and enhance mechanisms for interacting with the formal UNFCCC process. There is a significant opportunity now to mainstream climate action on transport in order to deliver the Paris Agreement objectives among UNFCCC Parties.

The transport sector – which according to several accounts was one of the most organized, prepared and well represented in Marrakech – is ideally placed to maximize its role in tackling climate change. Based on the formal progress in Marrakech through the UNFCCC process, along with numerous side discussions (including with potential funders), the PPMC envisages the following activities for 2017 (all subject to confirmation):

• Organize conference call with GCAA transport initiatives in December 2016 to de-brief them on Marrakech, and have an initial discussion on the proposed program of work for 2017. This will include addressing geographic and thematic gaps in the Climate Action on Transport, scaling up ambition of the initiatives, and improving the 2017 reporting cycle with improved documentation of transport initiatives on the NAZCA website.
• Ensure that the transport sector increasingly reflects action on adaptation under the MPGCA. Discuss transport’s contribution to the new Global Climate Action (GCA) annual report (based on our existing reports).

• Continue active engagement with Galvanizing the Groundswell of Climate Actions (GGCA), which has grown into a strong advocate for, and coordinator of, action by non-state actors within the UNFCCC process.

• Organize regional thematic meetings on transport, with the first hosted by Morocco in March or April 2016, with further meetings planned in Europe, Asia and Latin America (with follow-up in 2018). The purpose of these meetings will be to engage with governments on the 15 GCAA Transport Initiatives, to remove barriers to scaling up implementation, to discuss the Global Macro Roadmap (and possible regional variations) and to introduce the Quick Wins. Where relevant, the transport sector should also participate in global thematic meetings organized by the UNFCCC.

• Maintain the GCA Transport Team consisting of PPMC, SEI and Morocco. Meet with the new Fijian Climate Champion Inia Seruiratu and the incoming COP Presidency team in order to bring them on board in the GCA Transport Team.

• Increase engagement in the Technical Experts Meeting (TEM) Process. Contribute to a technical paper on Climate Action from the UNFCCC Secretariat, before the May 2017 meetings in Bonn. During the Bonn session the transport sector aims to participate more actively in TEMs along with governmental representatives, which will involve going beyond “show and tell” and engaging Parties in a more comprehensive policy discussion on scaling up and supporting climate action to transform the transport sector in the next few decades.

• Contribute to the preparation of a “Summary for Policy Makers” to be prepared in advance of COP23.

• Strengthen coordination and cooperation with other MPGCA Thematic Areas (e.g. Land Use, Energy). Where possible contribute to ministerial meetings of related sectors, initially planned with energy, health and finance ministers meetings during the first half of 2017.

• Present updated Climate Action on Transport into selected scheduled transport meetings such as the annual ITF Summit in Leipzig in May 2017, to bring the topic to transport ministers, and contribute actively to the planned second Summit of Alliances and Coalitions which will be an important moment to review new processes in support of climate action.

• Continue cooperation with the private sector and conduct a series of consultations throughout 2017, building on key meetings organized by WBCSD and other private sector organizations.

• Plan for strong presence of the transport sector at COP23 (to be held in Bonn 6-17 November 2017), with the aim to have a second Transport CEO and Ministerial Round Table more structurally integrated in the MPGCA program.

• Participate in the High Level Event on Climate Action during COP23, in particular to report on progress, introduce new initiatives and set out climate action plans for the transport sector in 2018. Aim for more joint events with other thematic areas.

• Consider how Transport Day 2017 can be used in the most effective manner to support accelerated action on adaptation and mitigation in the transport sector.
Way Forward for the PPMC and the Transport Sector en Route to COP23

COP22, through the Marrakech Action Proclamation and the Marrakech Partnership for Global Climate Action, has provided the PPMC as well as the facilitators of other thematic areas with a clear mandate to continue and intensify efforts to coordinate action by non-State actors on mitigation of, and adaptation to, climate change. In the case of the transport sector, the overwhelmingly positive response to the integrated strategy of combining short term action through the MPGCA Transport Initiatives and Quick Wins on Transport, Climate Change and Sustainable Development with medium-long term action through a phased, regionally specific Global Macro-Roadmap on the Decarbonization of Transport we now have a clear way forward for activities of the PPMC in 2017.

To strengthen the voice of the transport sector, the PPMC intends to further facilitate the self-organization of the sector and where required, to strengthen the light-touch governance to ensure that all groups in the transport sector will feel fully represented under the PPMC. Emphasis will be given to the further integration of the business sector based on the interest expressed in the Transport CEO Roundtable during COP22.

PPMC Activities throughout 2017 will focus on: (a) analytical work on mitigation of, and adaptation to, climate change in support of relevant UNFCCC discussions as well as implementation of the Quick Wins and further development of the Global Macro-Roadmap; (b) facilitation of existing and emerging MPGCA Transport initiatives; and (c) regional and stakeholder consultations on the Global Macro-Roadmap as well as other relevant PPMC outputs and activities. We are also committed to ensure a better balance between mitigation and adaptation in our activities in 2017. Building on the contacts made in Marrakech with other thematic areas and sectors, the PPMC aims to develop at least one joint activity with each of the other thematic areas under the MPGCA, to align the implementation of the Quick Wins where relevant with other thematic areas, and to consult widely with the other thematic areas in the further development of the Global Macro-Roadmap.

Success in transforming the transport sector towards a net-zero emission economy will require a deeper and more sustained engagement with the UNFCCC process. This can be accomplished in part through active participation in calls for submissions under the UNFCCC and through a more active participation in the TEM process (including possible regional TEMs).

The PPMC plans to deliver its contribution in 2017 also as part of a wider MPGCA Transport team that should include representatives from the current COP Presidency and its High Level Champion (Morocco) as well as the incoming COP Presidency and its High Level Champion (Fiji). Taking into account the growing role of the UNFCCC Secretariat in supporting and facilitating the MPGCA it is suggested that the impact of the MPGCA Transport team will be stronger if the UNFCCC Secretariat is actively participating in the MPGCA Transport team.

One of the strongest recommendations from COP22 is that effective action on transport and climate change will require the transport sector to move beyond the UNFCCC process and to make active linkages with sustainable development-oriented processes as well as institutional processes within individual, transport related, sectors such as energy, health and finance. The PPMC will in 2017 therefore participate on a regular basis in processes outside the UNFCCC to build support for its plans to transform the transport sector. This makes it important that the PPMC ensures that analytical work on transport and climate change goes beyond climate aspects and integrates, where required or helpful, sustainable development aspects.

For the PPMC to be able to deliver successfully on these objectives in 2017 will require the active support of member organizations of the SLoCaT Partnership and Michelin Challenge Bibendum, the two composite parts of the PPMC, as well as other partners. However, even with such active support of the SLoCaT and MCB members there will be a need for additional support for the PPMC Secretariat to effectively implement its coordinative and facilitative role. With the mandate provided through the MPGCA, the activities of the PPMC will not just be focused on the annual COP meeting but will need to be spread out through the year. This more distributed model of climate action has resource implications that need to be addressed, but also promises a more sustained series of opportunities for transport to engage more fully in the UNFCCC process.