





Marrakech Partnership for Global Climate Action (MPGCA)
Transport Initiatives: Stock-take on action toward
implementation of the Paris Agreement and the 2030 Agenda
on Sustainable Development

Overview of Progress
December 2018

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I. Introduction

1. Objectives of the Marrakech Partnership for Global Climate Action

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 developed by non-state actors in the transport sector were showcased during the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) on December 3rd, 2015.¹

COP21 also decided to appoint High Level Champions (HLC) to "facilitate through strengthened high-level engagement in the period 2016–2020 the successful execution of existing efforts and the scaling-up and introduction of new or strengthened voluntary efforts, initiatives and coalitions." Following the appointment of the first two High Level Champions and the COP 22 in Marrakech, the action agenda was renamed as Marrakech Partnership for Global Climate Action (MPGCA) in November 2016.

These commitments were developed to trigger more ambitious action in all major parts of the transport sector. The underlying idea of the MPGCA was to make sure all key sectors were covered with impactful initiatives, which could be joined by states as well as non-states actors, so that the global ambition of countries to act on climate change can be scaled up. The MPGCA is planned to be a living process: some initiatives might be added as they mature or as gaps are identified; some might exit.

In 2017, six new transport initiatives were formed. An additional transport initiative was also established in 2018. There are now 22 MPGCA Transport Initiatives as of December 2018, which include both passenger and freight transport and touch on all transport sectors and modes:

General urban transport:

- C40 Green and Healthy Streets Declaration (formerly the C40 Cities Clean Bus Declaration)
- EcoMobility Alliance
- MobiliseYourCity
- Taxis4SmartCities
- Transformative Urban Mobility Initiative (TUMI)
- UIC Low-Carbon Sustainable Rail Transport Challenge
- UITP Declaration on Climate Leadership

Freight and Logistics:

• Global Green Freight Action Plan (GGFAP)

Fuel Efficiency:

- below50
- Global Fuel Economy Initiative (GFEI)
- Global Strategy for Cleaner Fuels and Vehicles

¹ http://newsroom.unfccc.int/lpaa/transport/press-release-lpaa-transport-transport-industry-drive-for-improved-energy-efficiency-and-electro-mobility-to-stem-high-growth-of-emissions/

Electric Mobility:

- Electric Vehicle Initiative
- EV100
- Urban Electric Mobility Vehicles Initiative (UEMI)
- ZEV Alliance

Cycling and Walking:

- Cycling Delivers on the Global Goals
- Global Sidewalk Challenge

Aviation:

- Airport Carbon Accreditation
- Aviation's Climate Action Takes Off

Transport Technology:

• ITSfor the Climate

Road Transport:

Low Carbon Road and Road Transport Initiative (LC2RTI)

Waterborne Transport:

Navigating A Changing Climate

The 22 transport initiatives cover all modes of transport for passengers and freight and contribute to all three components of the Avoid-Shift-Improve approach necessary to address the environmental impacts of transport. *Avoid* - unnecessary trips, *Shift* - to more sustainable and shared modes and *Improve* the environmental performance of transport modes - technological improvements to reduce GHG emissions and air pollution. Some initiatives also address climate change adaptation requirements.

The MPGCA Transport Initiatives represent a broad range of multi-stakeholder coalitions expanding to cover for all modes of transport through decentralised action to reduce transport greenhouse gas emissions and strengthen the resilience of transport infrastructure. By demonstrating action on the ground and the considerable co-benefits of climate action on transport (e.g. better urban air quality, less road deaths and increased access) the transport initiatives aim to help increase ambition of NDC's and the efficiency of their implementation. The work of the transport initiatives also actively contributes to the UN 2030 Agenda for Sustainable Development and the implementation of UN HABITAT's New Urban Agenda.

Collectively these initiatives, if widely supported by state-and non-state actors, and implemented at scale, can reduce the carbon footprint of an estimated half of all the passenger and freight trips made by 2025. Actions such as these can contribute to substantive savings associated with a shift to low carbon transport. The International Energy Agency (IEA) have estimated² that these could be as high as US\$70 trillion by

 $^{^2\} http://www.iea.org/publications/free publications/publication/policy-pathways---energy-efficiency-in-urban-transport-systems.html$

2050 as less money would need to be invested in vehicles, fuel and transport infrastructure reflecting the strong economic case for climate action in the transport sector.

The transport initiatives are harnessing the energy and interest created by the Paris Agreement to mobilizing global climate action and are voluntary commitments from a wide range of non-state actors.

There is an increasing, but not universal, recognition from national governments of the essential roles of non-state actors in achieving and even guiding the mitigation efforts needed to deliver on the Paris Agreement. Section V of the COP21 Decision "Welcomes the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities." Numerous references to the role of non-party stakeholders can also be found in other parts of the COP21 Decision.

The transport initiatives are at various stages in terms of defining targets and indicators to monitor their commitments. During 2018, these Initiatives have continued to expand their activities and on the ground impact. They benefit from the growing interest to act on transport, which is growing in part because of the Nationally Determined Contributions (NDCs) (75% of which prioritize transport action). Progress is being made at a policy level with more low carbon transport related policies being put in place as well as through concrete actions on the ground.

2. Report overview

This update report presents profiles of the 22 MPGCA transport which outlines their respective objectives, commitment, and signatories and partners. They also include the progress made by the initiatives since COP23 and activities in the context of (1) outreach and coalition building; (2) capacity building; (3) knowledge development; (4) policy-making and implementation; and (5) monitoring and reporting. The profiles also highlight how each initiative contributes to advancing the Paris Agreement goals.³

II. Progress Update of MPGCA Transport Initiative (2018)

1. Airport Carbon Accreditation

Airport Carbon Accreditation:

Reducing carbon emissions & increasing airport sustainability

Objective

Airport Carbon Accreditation was developed and launched by Airports Council International (ACI) Europe in 2009. As of late 2014, Airport Carbon Accreditation had expanded worldwide to all ACI regions. Today it is the only global carbon management standard for airports.

It aims to help airports reduce carbon emissions and achieve best practice in carbon management. The program is structured around four increasingly stringent accreditation levels, with the highest one being carbon neutrality. Reaching this status requires an airport operator to reduce its own emissions

³ For previous update reports on the transport intiatives, please visit: http://www.ppmc-transport.org/transportinitiatives/

Airport Carbon Accreditation:

Reducing carbon emissions & increasing airport sustainability

as much as possible, compensate any residual emissions by purchasing carbon offsets and engage with its stakeholders to support them in reducing their emissions.

Commitment

The initiative commits to increase airport accreditations in all regions, and encourage already accredited airports to continuously enhance their carbon management and thus progress towards the higher levels of accreditation.

In June 2017, the initial commitment for the European region - 50 carbon neutral airports in Europe by 2030 – has been upgraded. The target is now to achieve 100 carbon neutral airports in Europe by 2030.

Partners and Signatories

As of November 2018, 249 airports worldwide are accredited. 48 of them are carbon neutral, including 39 in Europe, 6 in Asia-Pacific and 1 in North America, Latin America and the Caribbean and Africa respectively. The program is managed by ACI Europe in close cooperation with the other ACI regions and support by ACI World.

The administration of the program, including the review of applications and award of accreditations, is ensured by an independent third party, the consultancy WSP.

Activities of the Initiative

Outreach and coalition building:

- Since COP23, new participants have joined the program and progress towards the higher levels of accreditation has been recorded in all world regions. As of November 2018, 249 airports worldwide are accredited, representing over 46% of world air passenger traffic. In reporting year 9 (May 2017-May 2018), accredited airports have reduced over 347,000 tons of CO2 and offset 672,000 tons of CO2.
- The initiative's plan for 2018/2019 is to continue to progress towards additional accreditations through continued cooperation with UNFCCC and the SLoCaT Partnership.



Figure 1. Airport Carbon Accredited airports over time (2010-2018)

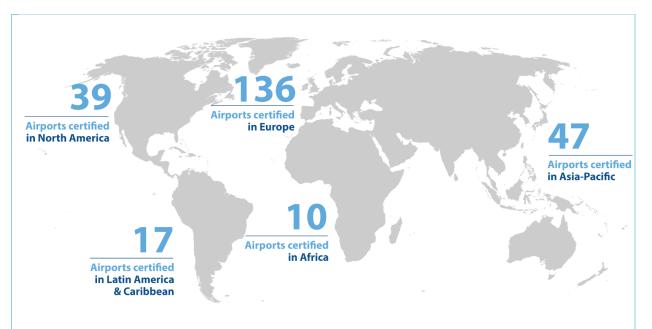


Figure 2. Distribution of Airport Carbon Accredited airports

Capacity building:

- A series of dedicated workshops are being delivered to the ACI regions, meetings are taking place, while the Guidance Document (i.e., the manual that explains the step by step process and requirements of accreditation) has been translated into French and Spanish. Additional guidance material for airports is being prepared.
- Exchange of best practices in carbon management is continuously taking place between accredited airports, in particular through a dedicated *Airport Carbon Accreditation* Task Force.
- A new e-newsletter Community, dedicated exclusively to accredited airports, has been launched.

Knowledge development:

- The Airport Carbon and Emissions Reporting Tool (ACERT), provided by ACI World in collaboration with Zurich Airport, is available at no cost to airports and can in particular help small airports become *Airport Carbon Accredited*.
- The program Administrator WSP has carried out a study on carbon reduction opportunities used by accredited airports. Over 1700 opportunities have been identified, with the most frequently used ones referring to lighting and HVAC systems. These results will support the development of additional carbon management guidance for airports.
- The Airport Carbon Accreditation Task Force is working on the long-term future of the program, by analyzing how it can foster emissions reduction initiatives which are consistent with the ambition of the Paris Agreement.

Monitoring and reporting:

 Airport Carbon Accreditation continues to report on the program developments and the carbon performance of accredited airports in its Annual Reports. They are available on www.airportcarbonaccreditation.org.

Airport Carbon Accreditation:

Reducing carbon emissions & increasing airport sustainability

 Updated information on program participation as well as airport case studies and interviews are available at <u>www.airportco2.org</u>.

Resources and Focal Point

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2. Aviation's Climate Action Takes Off

Aviation's Climate Action Takes Off:

Collaborative climate action across the air transport sector

Objective

The Aviation's Climate Action Takes Off initiative aims to control international aviation CO₂ emissions through a basket of aviation CO₂-reduction measures, including a goal of carbon-neutral growth through a global market-based mechanism.

Commitment

The initiative commits to support short-, medium- and long-term goals to cut emissions from aviation. It showcases action by industry and states in addressing CO_2 emissions from international aviation. Measures include supporting developing new, more efficient aircraft technology and sustainable aviation fuels while promoting and deploying operational improvements to reduce CO_2 emissions from aircraft already in service. It calls for better use of infrastructure, especially in air traffic management.

Through the Air Transport Action Group (ATAG), the aviation industry also provided strong support to the development and implementation of International Civil Aviation Organization (ICAO)'s Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), a landmark agreement, adopted at the last ICAO Assembly in October 2016, making the aviation industry the first sector to adopt a global market-based measure to address climate change.⁴

Governments agreed the world's first global market mechanism for any single sector – the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) will start to offset the increase of international aviation emissions from 2021, as compared to the baseline level of 2019 and 2020 average emissions.

In June 2018, the ICAO Council adopted global Standards and Recommended Practices (SARPs), guidance, and tools for a robust Monitoring, Reporting and Verification (MRV) system for international aviation CO₂ emissions under CORSIA, which will be implemented by Member States and aeroplane operators from 1 January 2019. In addition, ICAO is continuing its work for the determination of eligible emissions units that aeroplane operators can use to meet their offsetting requirements under CORSIA.

Partners and Signatories

ICAO represents 192 member states and ATAG represents 29 private sector companies or associations from the aviation industry.

⁴ http://www.icao.int/environmental-protection/Pages/market-based-measures.aspx

Aviation's Climate Action Takes Off:

Collaborative climate action across the air transport sector

Activities of the Initiative

Outreach and coalition building:

- At the 2016 ICAO Assembly, Governments agreed the world's first global market mechanism for any single sector – the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) will offset the increase of international aviation emissions growth from 2021, as compared to the baseline level of 2019 and 2020 average emissions.
- Organized two series (2015 and 2016) of five Global Aviation Dialogues ICAO/GLADS on marketbased measures prior to the 2016 ICAO Assembly to address climate change with participations of states, civil society and aviation stakeholders in Africa, Middle East, Europe and North Atlantic, Asia-Pacific and the Americas
- Organized five ICAO regional seminars on CORSIA both in 2017 and 2018 to provide hands-on training for the implementation of CORSIA.
- In order to prepare for the CORSIA implementation from 1 January 2019, ICAO is also taking ACT-CORSIA (Assistance, Capacity-building and Training for the CORSIA) programme, including the establishment of CORSIA Buddy Partnerships among Member States, through which 15 donor States provide assistance to 90 recipient States to build their capacities to implement CORSIA.
- Organized ATAG roundtables for industry in seven cities worldwide.
- Organized Sustainable Aviation Forum by ATAG
- The historical global market-based measure agreement on CORSIA to address international aviation CO₂ at the 2016 ICAO Assembly will complement the ambition under the UNFCCC Paris agreement NDCs.

Knowledge development:

- ICAO has worked with governments, industry and civil society to deliver the world's first CO2 Standard for Aircraft, which was adopted by the ICAO Council in 2017. This is the very first "global design Standard" for CO2 emissions for any sector, and it was realized after six years of intensive work by many of the best experts in the world. The Standard guarantees up to a 10% fuel efficiency gain for each new type developed from 2020, relative to the average of current production aircraft types. It also addresses new deliveries of those aircraft that are already inproduction from 2023. If they have not complied with the standard by 2028, they cannot be produced anymore. For context, approximately 40% of current production airplane type designs will need to be improved to meet the Standard.
- Regarding sustainable aviation fuels, the ICAO Conference in 2017 endorsed the 2050 ICAO Vision for Sustainable Aviation Fuels and called on States, industry and other stakeholders, for a significant proportion of aviation fuels to be substituted with sustainable aviation fuels by 2050. The 2050 ICAO Vision will be periodically reviewed through a stocktaking process to continuously assess progress on the development and deployment of sustainable aviation fuels, leading to the convening of the next ICAO conference no later than 2025, with a view to updating the 2050 ICAO Vision to include a quantified goal by 2050.

Resources and Focal Point

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3. below50

below50:

Growing the global market for the world's most sustainable fuels

Objective

below50 is a global campaign that brings together companies and organizations who commit to growing the global market for the world's most sustainable fuels. It connects the entire value-chain for sustainable fuels that produce at least 50% less CO2 emissions than conventional fossil fuels. The goal is to create the demand and market for these fuels to scale up their deployment.

Commitment

below50 aims to create demand for sustainable fuels, scale up deployment and increase the number of companies choosing below50 fuels by:

- Creating intersectoral B2B opportunities across supply chains.
- Engaging with investors and financiers to map investment barriers and develop de-risking mechanisms.
- Addressing legislative and financial barriers to sourcing below50 fuels.

Partners and Signatories

The core partner of below50 is the World Business Council for Sustainable Development (WBCSD). In addition, below50 has 35 supporters including low-carbon fuels producers and consumers and research and development organizations.

Relevance to advance the Paris Agreement goals

Growing the market for low carbon fuels in transport directly reduces the growth in greenhouse gas emissions from transport operations.

Activities of the Initiative

Outreach and coalition building:

below50 advocates for low-carbon fuels by:

- Developing clear messages for policymakers.
- Participating in regional dialogues to establish long-term targets, incentives and policy frameworks.
- Promoting public-private partnerships and joint initiatives.
- Publishing reports on progress, policy recommendations, pilot projects and best practices.
- Supporting the establishment of regional hubs to date below50 has established 4 hubs in Australia, Brazil, Europe and the USA.

Capacity building:

- below50 amplifies the efforts of supporters on its communications platforms and has run a communications campaign in 2018 to showcase their work.
- below50 supports regional hubs by co-hosting events to support the development of lowcarbon fuels.

Policy-making and implementation:

- In 2018 the below50 campaign developed a web-based policy tool, offering insights into policy dos and don'ts to enable uptake of low-carbon fuels.
- below50 supports regional hubs in communicating with the right stake holders. For example, below50 members in collaboration with CEBDS submitted a letter of support for the RenovaBio program to the Brazilian government.

below50:

Growing the global market for the world's most sustainable fuels

Resources and Focal Point

Initiative website: http://below50.org/

Damiana Serafini (Serafini@wbcsd.org), World Business Council for Sustainable Development

(WBCSD)

4. C40 Green and Healthy Streets Declaration (Formerly the C40 Cities Clean Bus Declaration)

C40 Green and Healthy Streets Declaration (Fossil Fuel Free Streets): Raising ambition and catalyzing markets

Objective

Building upon the success of the C40 Cities Clean Bus Declaration, C40 launched the Green and Healthy Streets Declaration (Fossil Fuel Free Streets Declaration) in October 2017. It has two goals 1. To give a clear signal to the private sector that there is a growing demand for zero emission products and services 2. To raise the level of ambition among all cities to transition to zero emissions transport

Commitment

Signatory cities commit to:

- 1. Procure, with their partners, only zero emission buses from 2025
- 2. Ensure a major area of the city is zero emissions by 2030

Partners and Signatories

26 cities around the world (20 C40 cities and 6 non-C40 cities) have signed the declaration as of October 2018. Signatories so far are: Auckland, Barcelona, Birmingham (UK), Cape Town, Copenhagen, Greater Manchester, Heidelberg, Honolulu, London, Los Angeles, Medellin, Mexico City, Milan, Oslo, Oxford, Paris, Quito, Rome, Rotterdam, Santa Monica, Seattle, Seoul, Tokyo, Vancouver, Warsaw, West Hollywood.

Activities of the Initiative

Outreach and coalition building:

- The declaration was launched at the Together 4 Climate event in Paris in October 2017, where mayors of 12 cities committed to the declaration. More information on the declaration and the activities signatory cities are taking to deliver the objectives can be found here
- Over 2018, C40 used the Global Climate Action Summit in San Francisco to build momentum
 around the declaration and announce a total of 26 signatory cities (with a purchase potential
 of over 80,000 buses and population reach of 140 million citizens). An event on the main
 program at GCAS showcased the declaration, including 3 mayors talking about their
 commitment, and important stakeholders Leaseplan and the International Transport Workers'
 Federation voicing their support.
- C40 have been working with The Climate Group and Under 2 Coaltion to launch the ZEV
 Challenge pulling together the demand for zero emission vehicles from business, states and
 regions, and cities, to then challenge vehicle manufacturers to ensure they meet the demand
 and commit to a future of only zero emission vehicles.
- C40 have delivered regional workshops to support signatory cities to design their zero emission area strategy and timeline. The initial workshops were held in Seattle and Milan in 2017, and a third regional workshop will be held in Latin America in early 2018.

C40 Green and Healthy Streets Declaration (Fossil Fuel Free Streets): Raising ambition and catalyzing markets

Access to cities for freight and commercial vehicles is an ongoing challenge for cities wanting
to shift to zero emissions, C40 is developing a new workstream on zero emissions freight to
problem solve the challenges facing cities delivering zero emission areas.

Resources and Focal Point

Fossil Fuel Free Streets Declaration: https://www.c40.org/other/fossil-fuel-free-streets-declaration Gunjan Parik, gparik@c40.org

5. Cycling Delivers on the Global Goals

Cycling Delivers on the Global Goals

Objective

Show the importance of cycling to achieve the new UN Sustainable Development Goals (SDGs), with special attention to climate action.

Commitment

The commitment showcases the ambitions of cities to increase the modal share of cycling worldwide and to double cycling in Europe by 2020. It aims to mobilize support of members from the World Cycling Alliance (WCA) and the European Cyclist Federation (ECF) enable local, national and international governments and institutions to scale up action on cycling.

Partners and Signatories

The commitment is supported by ECF and WCA, representing over 130 civil society organizations worldwide.

Relevance to advance the Paris Agreement goals

The initiative advances the Paris Agreement goals by focusing on mitigation (shifting modal share in cities towards cycling) and by providing a means to showcase these cities that commit to increasing their modal share of cycling.

Activities of the Initiative

Outreach and coalition building:

- Continue to promote and celebrate the 3rd of June as World Bicycle Day; officially recognized by the UN, and use as a means of outreach on the importance of cycling in sustainable mobility worldwide.
- Continue to organize Velo-city, the annual global cycling summit, to provide a space for coalition and partnerships to form.
- ECF and WCA work on enhancing the international, global collaboration of Civil Society Organizations and their partnerships with governments, governmental organizations and the private sector.
- ECF are WCA are preparing the next steps in the development of the WCA: the launch of the global legal entity WCA in 2019.

Capacity building:

- ECF, with the Dutch cities Arnhem and Nijmegen, has organized the 2017 edition of the Velo-city conferences series, the global cycling summit: the premiere place for exchanging knowledge and experience on cycling.
- The next Velo-city conference will be held in Dublin in 2019.

Cycling Delivers on the Global Goals

Policy-making and implementation:

• ECF, together with other stakeholders in the cycling sector (including the bicycle industry), has developed a draft EU Cycling Strategy document for the European Commission.

Monitoring and reporting:

Monitoring the list of cities which have adopted modal share targets.

Resources and Focal Point

Cycling Delivers on the Global Goals: https://ecf.com/groups/cycling-delivers-global-goals Global High Shift Cycling Scenario (ITDP/UC Davis): https://ecf.com/groups/global-high-shift-cycling-scenario

World Bicycle Day Campaign page: https://ecf.com/worldbicycleday-campaign

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6. EcoMobility Alliance

EcoMobility Alliance

Ambitious cities committed to sustainable transport

Objective

The EcoMobility Alliance is a network of cities committed to building a sustainable transport future ensuring low-carbon, people-centered and socially inclusive mobility options.

Commitment

Through the EcoMobility Alliance, ICLEI brings together cities committed to advancing urban mobility to conceptualize, design and implement people- and climate-friendly urban mobility options that encourage innovation and entrepreneurship.

Though several activities, the EcoMobility Alliance reinforces local governments' commitments to transforming their transportation systems and mobility patterns, aiming to reduce automobile dependency and become more sustainable, low-carbon and people-centered.

Activities of the Initiative

Outreach and coalition building:

- Through various projects such as the EcoMobility Alliance, EcoMobility World Festival, and EcoMobility SHIFT, ICLEI brings cities together to have a collective and mutual learning and translate learning into practice by implementing policies, projects and investments to transform the current mobility patterns.
- The Alliance has also brought forward the voice of Alliance Cities and their mobility concerns at various international events such as the International Transport Forums, Autonomy: The Urban Mobility Summit, the UN Climate Talks, Metropolitan Solutions and many others.

Capacity building:

ICLEI empowers <u>EcoMobility Alliance</u> cities by providing technical expertise and the
opportunity to share their experiences and participate in knowledge exchange with other
Alliance cities from around the world.

EcoMobility Alliance

Ambitious cities committed to sustainable transport

- The Alliance secretariat has conducted capacity building activities together with Alliance
 partners in China Taipei, Germany and Ecuador. The main target groups for these events were
 policy-makers from local and national governments. EcoMobility Alliance workshops run by
 Alliance Cities provide the opportunity for peer-to-peer exchanges focusing on key issues of
 common concern and facilitate sharing of expertise among Alliance Cities, Alliance Partners,
 and experts.
- The Alliance has also supported various capacity building workshops organized by our partners and cities including the International Summer School: Made in Leipzig II; REN 21 Academy in Berlin, Germany, and many others.

Policy-making and implementation:

- During the EcoMobility World Festival 2017, the City of Kaohsiung transformed the streets of the historical Hamasen neighborhood into a dedicated space for ecomobile modes of transport such as walking, cycling, and various forms of public transport including shared and light electric vehicles. Kaohsiung was the second city in Asia to showcase autonomous shuttle buses in a real urban environment and invite the public for test-rides. The Kaohsiung Strategies for the Future of Urban Mobility was an outcome of the EcoMobility World Festival and Congress 2017 and provide a guide for city leaders to shape the future of urban transport in their communities, and ensure safe, clean, affordable, accessible, environmentally-friendly, intelligent and connected mobility options and transport systems for their residents.⁵
- The EcoMobility Alliance will work with selected cities to have an in depth understanding of their current mobility goals and review the current vision that they have for urban mobility. Through this needs assessment exercise, cities will also evaluate the EcoMobility related projects that they intend to implement.

Monitoring and reporting:

 The EcoMobility Alliance has updated the performance measurement system, EcoMobility <u>SHIFT</u> and pioneered this in China, India and Uganda.

Resources and Focal Point

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7. Electric Vehicle Initiative

Electric Vehicle Initiative

Accelerate the introduction and adoption of electric vehicles worldwide

Objective

The Electric Vehicles Initiative (EVI) is a multi-government policy forum dedicated to accelerating the introduction and adoption of electric vehicles worldwide.

Commitment

⁵ http://www.ecomobilityfestival.org/declaration/

Electric Vehicle Initiative

Accelerate the introduction and adoption of electric vehicles worldwide

In 2010, EVI was one of several initiatives launched under the <u>Clean Energy Ministerial</u> (CEM), a high-level dialogue among Energy Ministers from the world's major economies.

The EV30@30 Campain was launched in 2017 by the Clean Energy Ministerial (CEM) to speed up the deployment of electric vehicles and target at least 30 percent new electric vehicle sales by 2030. In 2018, the United Kingdom joined the campain, followed by 7 private sector partners.

The Campaign supports the market for electric two- and three-wheelers, passenger cars, light commercial vans, buses and trucks (including battery-electric, plug-in hybrid, and fuel cell vehicle types). It also works towards the deployment of charging infrastructure to supply sufficient power to the vehicles deployed. The EV30@30 Campaign also promotes city-level action, and the EVI Global EV Pilot City Programme (PCP) was launched in 2018, with an initial membership of 30+ cities across the World.

Partners and Signatories

EVI members include Canada, Chile, China, Finland, France, Germany, India, Japan, Mexico, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States. Portugal is an observer. The International Energy Agency is the EVI Coordinator.

Relevance to advance the Paris Agreement goals

The initiative was instrumental to mobilize action and commitments such as the <u>Paris Declaration on Electro-Mobility and Climate Change</u> at COP21 and the <u>Government Fleet Declaration</u> at COP22

Activities of the Initiative

Outreach and coalition building:

• Build on the success of the <u>Pilot City Forum</u> (28-29 May 2018, Helsinki, Finland – 2019 edition to be held in China) and facilitate networking and communication across stakeholders to accelerate the deployment of electric mobility solutions in cities.

Capacity building:

Support greater dialogue between member governments and across all stakeholders of
electric mobility, including municipal governments and the private sector on a number of
topics, including consumer adoption, mass transit (including electric buses), urban planning,
mobility as a service (including car and ride sharing), infrastructure and charging technology,
batteries and materials.

Knowledge development:

 Pool together information on the status and recent developments of the electric vehicles market worldwide, provide technology and policy analysis, summarize best practices and lessons learnt and provide future insights via long-term scenarios, in the annual <u>Global EV</u> Outlook series and other publications.

Policy-making and implementations:

- Policy focus to improve the understanding of best practices on electric mobility policy support, providing resources for capacity building to disseminate these best practices
- Launch in 2018 of the <u>Global EV Pilot City Programme</u>, aiming to achieve **100 EV-Friendly** Cities over five years

Monitoring and reporting:

Data and information sharing among EVI and PCP members and to the public.

Electric Vehicle Initiative

Accelerate the introduction and adoption of electric vehicles worldwide

Resources and Focal Point

Initiative website: https://www.iea.org/topics/transport/evi/

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8. EV100

EV100

Accelerate the transition to electro-mobility

Objective

To accelerate the transition to electro-mobility by leveraging the role corporate demand can play in driving EV uptake and roll-out of charging infrastructure.

Commitment

Companies joining EV100 make an individual commitment to transition their fleets to electric vehicles and/or install charging infrastructure at their relevant premises by 2030.

They can choose to make their commitment in one or more of four areas: directly controlled fleets (owned/leased), service provider contracts, workplace charging, and customer charging.

Partners and Signatories

EV100 is supported by <u>We Mean Business</u>, <u>Climate Works Foundation</u> and <u>Heising Simons</u> Foundation.

Launched in September 2017 during Climate Week NYC, EV100 currently (Nov 2018) counts 26 members from a wide range of geographies and sectors such as, for example Bank of America, Deutsche Post DHL, EDF Group, HP Inc, IKEA Group, LeasePlan, Nippon Telegraph and Telephone (NTT) and the State Bank of India.

The initiative will continuously grow and welcome further joiners. For a full list of participating companies, see www.theclimategroup.org/ev100-members.

In driving corporate EV uptake, EV100 also works closely with national and regional engagement partners such as <u>Ceres</u> (US) and the <u>Japan Climate Leaders Partnership</u> (Japan).

Relevance to advance the Paris Agreement goals

- Commitment actions will lead to direct transport emissions reductions as internal combustion engine vehicles are replaced by electric vehicles, and build early market demand for vehicles.
- The collective corporate action will also drive the transition to electric-mobility in the broader market: The forward-looking demand signal from companies drives market supply and gives political support to legislators.
- Corporate action also positions electro-mobility as a new mainstream solution to the general public, and makes it easier for staff and customers to make a personal transition.

Activities of the Initiative

Outreach and coalition building:

EV100

Accelerate the transition to electro-mobility

• EV100 is building a broad coalition of major global companies all making the public commitment to drive EV uptake in their own operations as outlined above. The initiative will continue to grow and build a critical mass of business EV leadership.

Capacity building:

• EV100 members are actively engaging in a regular <u>webinar series</u> and other peer learning opportunities, such as EV leadership roundtables and discussions, to share experiences and benefit from existing knowledge as they work to achieve their commitments.

Knowledge development:

A key aspect of the campaign's development is the public profiling of members. Through the
example of participating companies, EV100 is demonstrating the growing business case for
electro-mobility to a broad range of stakeholders including other businesses, policy makers and
the general public.

Policy-making and implementations:

 EV100 is building a unified voice from businesses on EV demand. Working closely with policy leaders, for example The Climate Group's Under2 Coalition and the CEM EVI's EV30@30 initiative, it will develop active dialogue between business and government about the framework conditions required to drive EV uptake.

Monitoring and reporting:

• EV100 monitors its members' progress in an annual reporting cycle that holds individual companies to account as well as allows the campaign to present an overarching picture of progress on corporate EV leadership and the related opportunities and challenges. The first EV100 annual report will be published in early 2019.

Resources and Focal Point

Initiative website: www.theclimategroup.org/project/ev100

Sandra Roling, Head of EV100, The Climate Group: sroling@theclimategroup.org

For updates on EV100 activities, webinars, reports and events: www.theclimategroup.org/subscribe

9. Global Fuel Economy Initiative

Global Fuel Economy Initiative:

Doubling vehicle efficiency: 100 Countries for 50 by 50

Objective

The Global Fuel Economy Initiative (GFEI) assists governments and transport stakeholders to improve vehicle efficiency to reduce carbon dioxide emissions.

Commitment

GFEI aims to double the average fuel economy of new light-duty vehicles globally by 2030, and all vehicles by 2050. For Heavy Duty Vehicles, our target is a 35% improvement in efficiency by 2035.

Global Fuel Economy Initiative:

Doubling vehicle efficiency: 100 Countries for 50 by 50

- At COP21, GFEI launched '100 for 50 by 50' to encourage new countries to commit to GFEI's fuel economy improvement goals.
- At COP22, GFEI announced a new commitment to regional capacity building, including a major African fuel economy conference.
- At COP23, GFEI set out the importance of improving the fuel economy of Heavy Duty Vehicles, as well as Electric Vehicles.
- GFEI continues to report country progress in implementing fuel economy policies

Partners and Signatories

There are six GFEI partner organizations (FIA Foundation, UN Environment, the International Energy Agency (EA), International Council on Clean Transportation (ICCT), ITF, and University of California, Davis), regional implementing partners, and the 65 countries where GFEI provides practical support.

Relevance to advance the Paris Agreement goals

GFEI has continued to support countries to develop and implement fuel economy policies to reduce CO₂ emissions from vehicles. Around new countries joined, making 70 countries that GFEI that have committed to working with GFEI. In addition, GFEI also provides supports to G20 markets.

Activities of the Initiative

Outreach and coalition building:

- GFEI has worked closely with Sustainable Energy for All (SE4ALL) this year to highlight the
 potential of fuel economy policies to improve energy efficiency, cutting energy use and carbon
 dioxide emissions. This includes events around the High Level Political Forum in New York in
 July, including a new film and high level reception with representatives of the Jamaican
 government.
- GFEI has also supported the G20 Transport Task Group in Argentina.

Capacity building:

- GFEI has continued in-country training and support, including holding workshops in Nepal, Moldova, Togo, Cambodia, Bangladesh, Jamaica, Montenegro, Peru, South Africa, Liberia, Malawi, Zimbabwe and Ghana
- In addition, GFEI has held regional training events Asia and Africa in 2018.

Knowledge development:

 GFEI launched a new working paper (WP18) focusing on the potential of electric vehicles to improve vehicle efficiency. Working Paper 17 examines how changes in vehicle size is affecting fuel economy.

Policy-making and implementations:

GFEI supports policy development across the countries it supports. This year Montenegro has
implemented a new fuel economy policy label, Ukraine has announced new vehicle efficiency
policy promoting electric vehicles. GFEI has also inputted into policy processes in the EU, US
and Australia.

Monitoring and reporting:

• GFEI provides regular updates on progress on its website (and on Twitter), including a comprehensive progress report, 'GFEI: Delivering Climate Action'

Global Fuel Economy Initiative:

Doubling vehicle efficiency: 100 Countries for 50 by 50

Resources and Focal Point

Initiative Website: www.globalfueleconomy.org

Latest news updates: http://www.globalfueleconomy.org/blog

Latest research: http://www.globalfueleconomy.org/data-and-research

State of the World report

Sheila Watson, Global Fuel Economy Initiative, info@globalfueleconomy.org

10. Global Green Freight Action Plan

Global Green Freight Action Plan:

Reducing the climate and health impacts of goods transport

Objective

The Global Green Freight Action Plan (GGFAP) aims to enhance the environmental and energy efficiency of goods movement in ways that significantly reduce the climate, health, energy, and cost impacts of freight transport around the world. The three main objectives are:

- To align and enhance existing green freight programs;
- To develop and support new green freight programs globally; and
- To incorporate black carbon reductions into green freight programs.

Commitment

The Action Plan calls on governments, private sector, civil society, and other actors to work in concert to align and enhance existing green freight programs, develop and support new green freight programs, and to incorporate black carbon reductions into green freight programs.

Partners and Signatories

The initiative is supported by 24 countries and 33 non-state actors including NGOs, UN organizations, freight associations, institutes, and private companies.

Relevance to advance the Paris Agreement goals

Green freight programs can help the freight sector reduce its contribution to climate change and air pollution by encouraging the adoption of more efficient and cleaner technologies and practices. They can help companies retrofit existing vehicles with technologies and measures to reduce fuel consumption (such as idle reduction technologies, aerodynamic retrofits, and rolling resistance improvements) as well as exhaust emission retrofits such as diesel particulate filters to reduce black carbon. These programs also help expedite the acquisition of new, more fuel efficient vehicles, all of which reduce greenhouse gas emissions from existing vehicles.

Activities of the Initiative

Outreach and Coalition Building:

• The initiative continuously updates its official website globalgreenfreight.org and has circulated regular newsletters containing news and updates on green freight.

Capacity building:

- The initiative has conducted four regional workshops (Africa, Asia, Europe and Latin America) and one international workshop on green freight programs that aimed to capacitate stakeholders, determine areas of collaboration, and support commitments under the GGFAP.
- Customization of Canadian eco-driving training materials to Brazil.

Global Green Freight Action Plan:

Reducing the climate and health impacts of goods transport

Knowledge development:

The following resources have been completed by the initiative:

- Freight assessment blueprint: practical guide for evaluating freight transportation in support of national green freight programs
- Global Logistics Emissions Council (GLEC) Framework for Logistics Emissions Methodologies: one universal and transparent way of calculating logistics emissions across the global multimodal supply chain.
- Freight assessments for Brazil, Mexico, China, Vietnam, and Phillippines
- Black Carbon Methodology for the Logistics Sector as supplement to the GLEC Framework
- Smart Truck Fleet Management tools to train fleet managers on best practices of fuel management

Other relevant resources disseminated by the Initiative includes:

- EPA SmartWay Training: capacity-building training to design, build and implement a Green Freight Program
- EPA Technology Verification Training: capacity-building training to design, build and implement a Tech Verification Program

Policy-making and implementation:

- The first Green Freight Strategy in Africa has been launched under the Northern Corridor Transit and Transport Coordination Authority at the 42nd Meeting of the Executive Committee of the Northern Corridor on 16 January 2017.
- Support to the harmonization of the SmartWay green freight programs in North America.
- Support to the official launch of green freight programs in Chile (Giro Limpio) and Argentina (Transporte Inteligente).

Monitoring and reporting:

• A steering group made up of volunteer partners of the Climate and Clean Air Coalition (Canada, United States, Clean Air Asia, International Council on Clean Transportation, Smart Freight Centre) tracks actions and reports progress annually.

Indicators include: number of countries committing to set up green freight programs, and with official green freight programs.

Resources and Focal Point

Global Green Freight website: http://www.globalgreenfreight.org/

Global Green Freight Action Plan- Action Statement: www.bit.ly/1KvubCW

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11. Global Sidewalk Challenge

Global Sidewalk Challenge:

Valuing and delivering more walkable communities

Objective

The Global Sidewalk Challenge raises the voice and profile for walking internationally and sets a challenge to governments, private businesses and NGO's to collaborate and invest in walking infrastructure, especially dedicated, safe and barrier free sidewalks at transport hubs, to benefit the people who walk most by focusing on the places most walked in order to reduce GHG emissions, improve the efficiency of public transport and deliver better public health.

Commitment

The Challenge seeks to catalyze action around the globe by consolidating the efforts of partner cities and organizations into a high-profile campaign that brings momentum and ambition to construct, or rehabilitate, 100,000km of additional dedicated, safe, barrier free, sidewalks in the proximity of public transport hubs, the majority of which will be in low- and middle-income countries by 2030.

Partners and Signatories

The initiative currently receives support from seven NGOs, 12 business companies, and four universities.

Relevance to advance the Paris Agreement goals

The carbon reduction potential of walking is not extensively researched (part of the problem), but one study estimates that increases in the mode share of walking in Bogota, Colombia from 20% to 25% of travel could reduce transport emissions by 6.9% at a cost of USD \$ 17/tCO₂. In addition, a package of walkways, cycle-ways and bus rapid transit could reduce emissions by 25% at a cost of USD \$ 30/tonneCO₂.

rable on Estimated and reduction potential and cost per ton or transport measure.	Table on Estimated GHG reduction	n potential and cost pe	per ton of transport measures
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Transport Measure	GHG Reduction Potential	Cost per t CO2 (\$)
BRT mode share increases from 0% to 5%	3.9	66
BRT mode share increases from 0% to 10%	8.6	59
Walking share increases from 20% to 25%	6.9	17
Bicycle share increases from 0% to 5%	3.9	15
Bicycle mode share increases from 1% to 10%	8.4	14
Package (BRT, pedestrian upgrades, bikeways)	25.1	30

BRT= Bus Rapid Transit, GHG = greenhouse gas, tCO2 = ton per carbon dioxide equivalent.

Sources Ribero et al, 2007, Transport and it's Infrastructure in Climate Change 2007, contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. B Metz et al, eds. Cambridge University Press, Cambridge and New York. L Wright and L Futon 2005, Climate Change Mitigation and Transport in Developing Nations. Transport Reviews 25(6) pp 671 – 717.

Global Sidewalk Challenge:

Valuing and delivering more walkable communities

Walking in its own right or packaged with public transport systems can enhance the carbon reduction potential of both modes and of the transport system as a whole.

Activities of the Initiative

During our first twelve months growing engagement and investment in walking initiatives as outlined below.

Outreach and coalition building:

- Represented walking and engaged with both funders, partners and implementing cities at a range of international forums, including: Launch of the WHO Global Action Plan for Physical Activity, ITF, Women Mobilise Women, Transforming Transportation and COP.
- Working with UN Environment to deliver their Share the Road campaign and identify opportunities for practical implementation of walking policies in African cities.
- Coordinated the 2018 annual International Conference on Walking and Liveable Cities in Bogota, Colombia attended by 3,500 delegates, with streaming reaching 26,000 viewers.
 - Working with INTALinc on a range of ideas and projects to enhance walkability in low-income countries

Capacity building:

- Working with Lagos, Nigeria funded by TUMI and Medellin Colombia, funded by Alstom, to undertake community led on-street analysis and implementation of improved sidewalk infrastructure.
- Preparing expert training workshops and walkshops on walking and pedestrian infrastructure for professional practitioners, community advocates and political decision makers, with plans to deliver in the Philippines, Bangladesh and Kenya in 2019;
- Developing an app with CEDEUS, Chile for local communities to assess their local streets and spaces for walking
- Provide technical assistance, including community engagement methods, to countries and cities to establish more investment in walking and better provision of infrastructure and facilities.

Knowledge development:

- Contributor to the TCC-GSR led by SLOCAT and ongoing development of walking data resources
- Working with University of Manchester to rebuild the online library of walking resources and best practices - to be launched in spring 2019.

Policy-making and implementation:

Working with the government of Hong Kong to frame up a walking and walkability strategy, action plan and community engagement activities for long term investment and enhancement of walkability.

Resources and Focal Point

Wright L, Fulton L. Climate change mitigation and transport in developing nations. Transport Reviews, 2005, 25(6): 691–717

Bronwen Thornton, <u>bronwen.thornton@walk21.com</u> and Jim Walker, <u>jim.walker@walk.21.com</u>

12. Global Strategy for Cleaner Fuels and Vehicles

Global Strategy for Cleaner Fuels and Vehicles

Objective

The goal of the Global Strategy is for most countries to achieve 50-ppm sulfur fuels by 2020, all countries to reach this level by 2025 and most countries to reach 10-ppm fuels by 2030. The environmental and health benefits of cleaner fuels and vehicles are substantial, eliminating an expected 14 million metric tons of particulate cumulatively through 2050 and up to 500,000 avoided premature deaths a year in 2050.

Commitment

In 2016, the Heavy Duty Vehicles Initiative of the Climate and Clean Air Coalition released "A Global Strategy to Introduce Low-sulfur Fuels and Cleaner Diesel Vehicles" (Global Strategy), the first clear and pragmatic roadmap for transitioning all countries to low sulfur and ultra-low sulfur diesel and advanced vehicle emission standards by 2030. At the CCAC December 2016 High Level Assembly, 38 countries recognized and fully endorsed the Global Strategy's approach and targets:

- Endorse the Coalition's Global Strategy to Introduce Low Sulphur Fuels and Cleaner Diesel Vehicles;
- Encourage Coalition partners and other relevant stakeholders to implement its
 recommendations, including by: adopting, maintaining, and enforcing world-class diesel fuel
 quality and tailpipe emissions standards for on road light and heavy-duty vehicles in our
 markets.
- Resolve to develop national implementation plans outlining timelines for the nationwide introduction of such standards, if such standards are not already in place.

Partners and Signatories

38 Countries: Australia, Bangladesh, Benin, Canada, Central African Republic, Chad, Chile, Colombia, Cote d'Ivoire, Denmark, Dominican Republic, Finland, Germany, Guinea, Ireland, Italy, Japan, Kenya, Luxembourg, Mali, Mexico, Moldova, Morocco, Netherlands, New Zealand, Nigeria, Norway, Paraguay, Peru, Philippines, Poland, Rwanda, Sweden, Switzerland, Togo, United Kingdom, United States, Uruguay

Relevance to advance the Paris Agreement goals

Pairing low sulfur diesel fuel with the right emission control technologies leads to reductions in black carbon⁶ as well as other climate pollutants (Bond et al., 2013). Euro VI-equivalent emissions standards that require particulate filters (i.e. filter-forcing standards) are the most effective option for controlling diesel black carbon, reducing PM2.5 emissions by up to 99% and black carbon by over 99%. Euro 4/IV standards also lead to reductions in black carbon emissions of up to 90% by forcing improvements in combustion technology; but, in general, vehicles meeting Euro 4/IV equivalent standards are not equipped with particulate filters and so deliver lower emission reductions than engines meeting a filter-forcing standard. An additional benefit of the introduction of more modern vehicles through the application of filter-forcing standards, with cleaner and more efficient engine technologies, is that these

⁶ One component in particular of PM2.5, black carbon, is a potent climate forcer that absorbs sunlight and releases heat, causing warming. Because black carbon only has a life in the atmosphere of less than a week, it is a so-called short-lived climate pollutant. Reducing emissions of short-lived climate pollutants like black carbon has a direct and immediate impact on climate change, and can therefore be a valuable complement to reducing CO₂ emissions as a tool to limit climate change.

Global Strategy for Cleaner Fuels and Vehicles

modern vehicles are generally more fuel-efficient (because of the parallel implementation of fuel economy standards) and thus the CO2 emissions of these vehicles are often also reduced.

A move to more stringent standards for diesel fuel and vehicles would reduce cumulative emissions of diesel black carbon by an estimated 7.1 million metric tons through the year 2050.

When the climate impact is assessed over a 100-year time horizon, these black carbon reductions amount to the equivalent of 6.0 billion metric tons of CO2; over a 20-year time horizon, the CO2-equivalent is 23 billion metric tons. Accounting for concurrent reductions in other short-lived climate pollutants, the implementation of stringent standards would save the equivalent of 5.5 billion metric tons of CO2 over a 100-year time horizon, or 22 billion metric tons of CO2-equivalent over a 20-year time horizon. Desulfurization also requires additional energy expenditures at the refinery, increasing refinery emissions. In the absence of further decarbonization of refinery energy supply, we estimate that cumulative refinery emissions associated with this global desulfurization could be up to 1 billion metric tons of CO2. This leaves a net benefit on a 100-year time horizon of at least 4.5 billion metric tons of CO2 equivalent.

Activities of the Initiative

Outreach and coalition building:

- Ministers and High-level representatives of Climate and Clean Air Coalition (CCAC) countries adopted and issued a <u>communique</u> reaffirming their commitment to improve air quality and slow the increasing rate of climate change by taking action to reduce emissions of short-lived climate pollutants such as black carbon at the Coalition's High Level Assembly in Marrakech, Morocco. Recognizing that motor vehicles, especially diesel vehicles, are major contributors to air pollution and near term climate change, they endorsed the <u>Global Strategy to Introduce Low-Sulfur Fuels and Cleaner Diesel Vehicles</u> (the "Global Strategy"), and encouraged CCAC partners and other relevant stakeholders to implement its recommendations. The CCAC continues to engage with partners on this by providing updates through the website and also requesting countries to report/share progress on their commitments.
- The Heavy Duty Vehicles Initiative implements the Global Strategy by building global, regional
 and sub-regional networks dedicated to developing and implementing standards and plans to
 achieve ultra-low and low sulfur levels in fuels coupled with advanced vehicle emissions
 standards. The focus is on Latin America, Asia, Africa and East Europe and 35 countries
 supported desulfurization.

Capacity building:

The CCAC Heavy Duty Vehicles Initiative implements the Global Strategy through capacity-building events (including training events) at the sub-regional and national levels. Our focus is on Latin America, Asia, Africa and East Europe and we have supported over 35 countries to date; in 2017-2019 our activities will focus on Benin, Ethiopia, Togo, Mali, Cote d'Ivoire,

⁷ http://ccacoalition.org/en/news/ccac-high-level-assembly-endorses-global-strategy-low-sulfur-fuels-and-cleaner-diesel-vehicles

Global Strategy for Cleaner Fuels and Vehicles

Nigeria, Paraguay, Dominican Republic, Mongolia, Moldova, Indonesia, China, East African countries, Argentina, Panama, Southern Africa, Georgia.

Knowledge development:

• Information and updates on the Global Strategy are being shared in the website and also through side meetings to the CCAC Governance meetings two times per year.

Policy-making and implementation:

The initiative works directly with sub-regional and national partners through cooperation agreements to develop and implement clean fuel and vehicle emissions standards. Recent examples include:

- West African countries commit to low sulfur fuels from July 2017 Nigeria just published their new standard, approved by the Minister of Trade. This proposal would assist the sub-region in implementing these new standards;
- Southern African countries (Mozambique, Malawi and Zimbabwe) to switch to low Sulphur diesel fuels from June 2017; Mozambique has published its new standards. This proposal would assist the sub-region in implementing new standards;
- China implements lower sulfur fuels in 2017 and adopts filter-forcing standards for new trucks and buses starting in 2019. This proposal would assist in implementing these new standards;
- Mexico implements lower sulfur fuels in 2016 and proposes filter-forcing standards for new trucks and buses.
- Santiago, Istanbul and Mexico City committed to soot-free urban bus fleets. Montevideo recommended that 400 Euro III buses (around 3 million US\$ in investment) be retrofitted with diesel particulate filters;
- The East African Northern Corridor Authority linking 6 East and Central African countries has adopted the first green freight strategy in Africa in 2016. Over 50 countries and organization pledge support to the Global Green Freight Action Plan. Mexico, Canada and the US are harmonizing their programs while Brazil, Vietnam develop theirs.
- Paraguay adopted a 50 ppm standard nationwide, December 2015.
- Uruguay reached agreement for a national Euro 4 import standard with car importers, Euro 5
 when 10 ppm sulfur fuel will be more widely available nationwide; Costa Rica now proposing
 a move to Euro 3 (2017), Euro 4 (2018), Euro 6 (2021) vehicle emission standards.
- East African countries Burundi, Kenya, Rwanda, Tanzania and Uganda formally adopted national standards for 50 ppm sulfur in fuels as of 1 January 2015.
- Peru adopted and implemented Euro 4/IV vehicle emission standards: 93% will have access to 50 ppm diesel affecting 27 million people
- Mexico revised emission standards in January 2018 for all new heavy-duty vehicles (both trucks and buses) to permit only Euro VI or US 2010 emission levels from 1 January 2021 increasing likelihood that Mexico achieves its 51% black carbon emission reduction target by 2030 included in its NDC
- Mozambique, Malawi and Zimbabwe now permit only 50 ppm S fuels to be imported
- Cote d'Ivoire decided to limit car imports to 5 years of age, 10 years old for buses and trucks

Global Strategy for Cleaner Fuels and Vehicles

- In 2017, the Soot-Free Clean Bus Industry Partnership was launched. Four global bus and
 engine manufacturers, Scania, BYD, Volvo Buses, and Cummins, voluntarily committed to
 make their portfolio of soot-free engine technologies available to 20 targeted megacities.
- ICCT launched the campaign on Soot-Free Transport

Monitoring and reporting

The CCAC Heavy Duty Vehicles Initiative develops new data and tools to both motivate and demonstrate progress towards deployment of soot-free diesel engines. Activities include annual reporting on global progress as well as visibility of the Global Strategy to address clean diesels worldwide. In 2018, the first Global Progress Towards Soot-Free Diesel Engines report was released: http://ccacoalition.org/en/resources/global-progress-toward-soot-free-diesel-vehicles-2018

Resources and Focal Point

Denise Sioson, denise.sioson@un.org, Secretariat of the Climate and Clean Air Coalition

13. ITS for Climate

ITS for Climate:

Using Intelligent Transport Solutions (ITS) to meet climate change targets for mobility Objective

ITS for Climate Initiative aims to stimulate the wide take-up of ITS solutions of proven ability to deliver savings in GHG emissions. It will not be possible to reduce global warming below the 2-degree target without major investment and changes in mobility and transport, especially in cities. The objective of ITS4Climate is to build and validate a toolkit of intelligent transport systems and services, and create a network of owners, suppliers and users to further deployment of the most effective ITS.

Commitment

The initiative commits to create an ITS for Climate solution toolkit founded on the consensus of expert practitioners; to spread awareness about ITS and its effectiveness to deliver GHG savings; to train and develop experts; to "cross-fertilise" public awareness based on best practice; and to promote policy and programs for deployment of low-carbon ITS.

Partners and Signatories

The ITS for Climate initiative is carried out by ATEC, ITS France, and TOPOS Aquitaine, who represent a few hundred members; more partners and supporters will be added in the next year, notably from other countries in Europe and beyond.

Activities of the Initiative

Outreach and Capacity building:

• The initiative will take a big step forward in 2019, thanks to a dedicated ITS4Climate Symposium and Exhibition planned for 17-18 September in Bordeaux. This will be prepared by a team of experts producing consensus papers on the status, effectiveness and outlook for the main types of intelligent mobility solutions, as well as for assessment of GHG emissions in transport and for low-carbon transport deployment measures. Previously a Digital Mobility Ideas Box was launched in 2016, whose results were announced at Marrakech COP22 transport day, and a Hackathon (2017).

Knowledge development:

ITS for Climate:

Using Intelligent Transport Solutions (ITS) to meet climate change targets for mobility

• The initiative is presently building the ITS for Climate Projects & Best Practices Database to register ITS solutions proposed or implemented to address climatic issues. It is also launching an international research program aimed at developing a methodology and toolbox to measure the impact of current and planned ITS projects, and develop a coordinated deployment plan of ITS Solutions specially in cities and surrounding regions. The consensus papers produced for the 2019 Symposium will be validated during the event and compiled into a "Green Book" of ITS for Climate. This resource will be promoted during 2019 and afterwards through existing networks and at future events (such as ITF Leipzig and the COP events).

Resources and Focal Point

For more information, please visit www.atec-itsfrance.net

Manifesto "ITS Addressing Climate Change" of the ministerial roundtable at the Bordeaux ITS World Congress (Oct 2015): http://itsworldcongress.com/wp-content/uploads/2015/11/Bordeaux-MRT-Full-Reportv2.pdf

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14. Low Carbon Road and Road Transport Initiative (LC2RTI)

Low Carbon Road and Road Transport Initiative:

Green roads - clean growth

Objective

The Low Carbon Road and Road Transport Initiative (LC2RTI) is led by PIARC the World Road Association and its objective is building strong and sustainable adaptation policies for the road network, including sensitive engineering structures and infrastructure (bridges, rural roads, etc.).

Commitment

The initiative is committed to:

- Providing guidance to road authorities in implementing sustainable national strategies addressing climate change;
- Reducing the carbon footprint of road construction, maintenance and operation through technological innovation, including ITS, and the implementation of green tendering and contracting;
- Developing road networks in line with new vehicle technologies (electric propulsion, autonomous cars, road/vehicle and vehicle/vehicle interactions, etc.);
- Enhancing intermodal cooperation.

Partners and Signatories

The initiative is supported by 121 government members of PIARC the World Road Association.

Activities of the Initiative

Knowledge development:

From 2016, LC2RTI will continue the implementation of the 4-year Strategic Plan to prepare for the main output of the initiative, including:

- Technical reports by 2019;
- Setting up a dedicated technical committee;

Low Carbon Road and Road Transport Initiative: Green roads – clean growth

- Organize 7 technical committee expert meetings and;
- Organize 2 seminars in low/ middle-income countries in the 2016-2019 period to enhance knowledge exchange on low carbon road transport;
- Address Climate change at the next World Road Congress in 2019.

The LC2RTI initiative will also update the <u>Intelligent Transport Systems/Road Network Operation</u> <u>Manual</u>, an online resource that provide guidance on the effective use of ITS in Road Network Operations based on practical experience in many countries.

The LC2RTI initiative will release the French and Spanish version of its International climate change adaptation framework for road infrastructure, already available on-line in English.

Accomplishments as of 2018 T4:

- Since 2016 three technical committees were established,
- E.1 Adaptation Strategies / Resiliency
- E.2 Environment Considerations in Road Projects and Operations
- E.3 Disaster Management

The technical committees have organised 4 seminars in low- and middle-income countries.

- The LC2RTI initiative report on "International climate change adaptation framework for road infrastructure" is available in both English, French and Spanish.
- The following reports have been produced by the technical committees
- Transport Strategies for Climate Change Mitigation and Adaptation, 2016 (https://www.piarc.org/en/order-library/25772-en-

 $\frac{Transport\%20Strategies\%20 for\%20Climate\%20Change\%20Mitigation\%20 and\%20Adaptation.ht}{m}$

- Appraisal of Sustainability of Transport Infrastructure Plans and Programs, 2016 (https://www.piarc.org/en/order-library/25808-en-
- <u>Appraisal%20of%20Sustainability%20of%20Transport%20Infrastructure%20Plans%20and%20Programs.htm</u>)
- A Special Project on Electric Road Systems was performed during 2018 which resulted in the following report:
- *Electric Road Systems* a solution for the future? (https://www.piarc.org/en/order-library/29690-en-Electric%20road%20systems:%20a%20solution%20for%20the%20future.htm)
- Forthcoming activities:
- New Special project was approved in October 2018 on Positive Energy Roads to be carried out during 2018-2019.
- Forthcoming reports:
- 6 reports and 1 online manual

To close the cycle of 2016-2019 several seminars and papers will be presented at the next World Road Congress which takes place in Abu Dhabi 6-9 October 2019. The congress program is being developed and you can find more information at the congress website:

Low Carbon Road and Road Transport Initiative:

Green roads - clean growth

http://www.aipcrabudhabi2019.org/events/world-road-congress-2019/event-summary-9cdd9b3dccdc450991da91decda350b4.aspx.

The Low Carbon Road and Transport Initiative is being discussed within the framework of the next Strategic Plan for 2020-2023.

Resources and Focal Point

PIARC website: http://www.piarc.org/en/

Strategic Plan for 2016-2019: http://www.piarc.org/ressources/documents/23762,PIARC-Initiative-

COP-21-EN.pdf

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15. MobiliseYourCity

MobiliseYourCity Partnership

Objective

- Enabling transformational changes
- Preparing investments and linking with development finance
- Reducing greenhouse gas emissions

To trigger sector investments and facilitate NDC implementation as well as accomplishment of SDGs through supporting local and national governments in emerging and developing countries in defining and implementing sustainable urban mobility policies and plans.

Commitment

- 100 cities engage in reducing their emissions by 50% through the development of integrated sustainable urban mobility plans
- 20 countries commit themselves to introduce sustainable urban mobility policies and/or incentive programs

Partners and Signatories

MobiliseYourCity Partnership is a global alliance for integrated urban mobility planning in emerging, developing and EU neighbourhood countries, and an international mobility flagship under the UN Marrakesh Partnership for Global Climate Action. It is a multi-donor action, jointly co-financed by the European Commission's Directorate-General for International Cooperation and Development (DG DEVCO), the French Ministry of Ecological and Solidarity-based Transition (MTES), the French Facility for Global Environment (FFEM), and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). The Partnership is implemented jointly by its implementing partners ADEME, AFD, CEREMA, CODATU, EBRD, GIZ, KfW, and WUPPERTAL INSTITUTE.

Activities of the Partnership

Outreach and coalition building:

• 42 city governments and 11 national governments validated as Beneficiary Partners (covering partners in Africa, Asia, Central Europe and Latin America).

MobiliseYourCity Partnership

• Strategic collaboration with UNHABITAT, UCLG, PLATFORMA, ITDP as well as with the Transformative Urban Mobility Initiative (TUMI) and the Sub-Sahara Africa Transport Program (SSATP)

Capacity building:

- National and regional trainings and workshops conducted e.g. in Ivory Coast, Morocco, Philippines, Tunisia, Cameroon, Dominican Republic;
- Workshops conducted along with international events, such as the European Development days in Brussels, European Transport Week, Climate Chance Summit, COP24 etc.
- Beneficiary partners provided with knowledge content (training programs, methodological guides, webinars, etc.)

Knowledge development:

- Measuring Urban Mobility GHG emissions: Finalization of a tool for partner cities to measure GHG emissions from urban mobility and set up related MRV system to report emissions at local, national and international level
- Sharing best practices: Ongoing development of a web-based international online networking & collaboration platform to share best practices in sustainable urban mobility planning and implementation of SUMPs and NUMPs; to support the active and fruitful exchange between all partners of MobiliseYourCity.
- Publications: Preparation of flagship guidelines on "National Urban Mobility Policies & Investment Programs (NUMPs)" and pertaining training material
- New topics to be developed: participation/concertation, mobility and digital

Policy-making and implementation:

In country operations and expected impacts are presented in a Global Status Report (please download from website). Exemplary ongoing operations:

- Latin America: Through the EUROCLIMA+ program Partners support:
 - o 3 national governments in the formulation of NUMPs (i.e. Chile, Ecuador, Uruguay)
 - 7 cities in the formulation of SUMPs (i.e. Ambato, Antofagasta, Arequipa, Bajada Santista, Cordoba, Guadala, Havana)
 - Various other cities with preparation and implementation of pilot projects
- Cameroon: SUMP development continues in Douala and Yaoundé. Car-free day organized in Douala in November 2018 with active city-to-city cooperation with Bordeaux Métropole.
 Main scenario for the SUMP in Douala established. Yaoundé to conduct a large consultation on status quo of current state of urban mobility. Finalization of both SUMPs during Q1 2019
- Tunisia: National level: the Ministry of Transportation is piloting the elaboration of a National
 Urban Mobility Policy with support of international consultants. The National Agency for
 Energy Efficiency (ANME) is carrying out a study to identify a short-list of measures to be
 integrated into the Transport NAMA.
- Morocco: At national level, the development of a strategic vision of urban mobility is finalized by the Ministry of Interior. Support to 5 Moroccan cities in the development of their SUMPs is on-going. A "MobiliseYourCity country chapter" composed of 13 Moroccan cities was created and a first set of trainings on MRV methodology and GHG emission calculation was conducted in November.
- Senegal: The development of a SUMP for Dakar is ongoing.
- Dominican Republic: Diagnostic phase completed, scenario building under preparation, SUMP to be finalized end of Q1 2019

MobiliseYourCity Partnership

Monitoring and reporting:

- Definition and application of the MobiliseYourCity monitoring & evaluation (M&E) framework;
- Publication of the MobiliseYourCity Global Status Report (2018)

Core Quantitative Impacts towards International Agendas

Impact Indicators:

- GHG emission reduction
- Access to public transport
- Traffic Safety
- Air pollution
- Modal split

Investment Indicators:

- KM of sidewalks already built or planned
- KM of cycle lanes already built or planned
- KM of bus lanes or other mass transit already built or planned
- Number of city center parking spaces for individual cars existing and planned (reduced or subject to parking management).

Resources and Focal Point

Website: http://www.MobiliseYourCity.net

Leaflets: http://MobiliseYourCity.net/resources/mobiliseyourcity-publications
For more information to join the Partnership: Contact@MobiliseYourCity.net

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16. Navigating a Changing Climate

Navigating a Changing Climate:

Think Climate to reduce emissions, strengthen resilience and adapt waterborne transport infrastructure

Objectives

Provide a platform to share knowledge and provide technical support to the owners, operators and users of waterborne transport infrastructure, enabling them to:

- Reduce greenhouse gas emissions and promote a shift to low carbon maritime and inland navigation infrastructure
- Act urgently to improve preparedness, strengthen resilience, and adapt maritime and inland navigation infrastructure
- Seek integrated and sustainable solutions, with an emphasis on Working with Nature

Commitment

The Navigating a Changing Climate partners are committed to promoting a shift to low carbon inland and maritime navigation infrastructure; to building capacity and enhancing decision-making on mitigation and adaptation options; and to raising awareness of the need to act urgently to improve preparedness and strengthen the resilience of waterborne transport infrastructure, with an emphasis on Working with Nature.

Navigating a Changing Climate:

Think Climate to reduce emissions, strengthen resilience and adapt waterborne transport infrastructure

Partners and Signatories

Partners comprise: the World Association for Waterborne Transport Infrastructure (PIANC), International Association of Ports and Harbors (IAPH), International Harbour Masters' Association (IHMA), International Maritime Pilots' Association (IMPA), European Dredging Association (EuDA), European Sea Ports Organisation (ESPO), the Institute of Marine Engineering, Science & Technology (IMarEST), Smart Freight Centre (SFC) and Inland Waterways international (IWI).

Relevance to advance the Paris Agreement goals

The initiative contributes to advancing the Paris Agreement in respect of:

- Implementing strategies to reduce greenhouse gas emissions
- Conserving and enhancing natural greenhouse gas sinks
- Cooperating to develop integrated, holistic, balanced mitigation/adaptation approaches
- Enhancing adaptive capacity
- Strengthening resilience and reducing vulnerability
- Dissemination of good practice; capacity building

Scale: global, transferable initiative **Specific**: defined targets and milestones

Transparent: see website http://navclimate.pianc.org and section on monitoring below

Results-oriented: focused on concrete, real-world action delivering mitigation outcomes, increased resilience and reduced vulnerability via the development of sector-specific technical resources

Ownership/capacity: driven by sector-representatives at international level

Activities of the Initiative

Outreach:

 In addition to the partner associations, the Navigating a Changing Climate initiative now has nearly 40 supporter organizations who have committed to contributing to the partners' objectives

Capacity building:

- Climate change was a key topic at two NaCC partner conferences in 2018: IHMA's conference in London in June and IWI's conference in Ireland in September
- In March 2018, partner IAPH launched its World Ports Sustainability Program (WPSP), including workstreams on climate & energy and on resilient infrastructure
- The World Ports Climate Action Program, a WPSP-supported initiative focused on climate change mitigation, was launched in September 2018 on the occasion of the Global Climate Action Summit
- ESPO's EcoPorts network, including mitigation and adaptation, reached almost 100 ports in 2018

Knowledge development:

- The digital port-call optimisation initiative promoted by IHMA is becoming a reality, with adoption by Port of Rotterdam amongst others, leading to improved efficiency and reduced emissions
- Incentive schemes/green charging of ports to reward front runners and improve shipping companies' market reputation are increasingly implemented

Navigating a Changing Climate:

Think Climate to reduce emissions, strengthen resilience and adapt waterborne transport infrastructure

- SFC announced the integration of more detailed methodologies for inland waterways and logistics sites (including maritime and inland terminals) into the update of the GLEC Framework due in 2019
- The EU Interreg NWE Green WIN project first met in November 2018. Led by Canal and River Trust and involving other IWI members, this will reduce carbon emissions from waterway pumping
- PIANC's Working Group report on Carbon Management is now in the publication pipeline *Monitoring and reporting:*
 - A survey on the costs and consequences of extreme weather events for ports and inland waterways will be launched by the partners in late 2018
 - The Navigating a Changing Climate Action Plan is being updated by PIANC to incorporate progress made by the partner associations in 2018, following partner meetings in March and September

Resources and Focal Point

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17. Taxis4SmartCities

Taxis4SmartCities:

Accelerating the introduction of low emission vehicles in taxis fleets by 2020 and 2030 and promote sustainability.

Objective

Worldwide Taxis Companies are committed to accelerating the energy transition of their vehicle fleet by 2020 and 2030. *More generally, the Taxi4SmartCities coalition intends to defend a progressive and modern version of the taxi as a key actor of the Smart City.*

Commitment

The original commitments remain:

- Bamboo Club: 33% of new vehicles entering the fleet emit less than 60g of CO2 / km by 2020.
- Oak Tree Club: 50% of new vehicles entering the fleet emit less than 60g of CO2 / km by 2020.
- Sequoia Club: 50% of new vehicles entering the fleet emit less than 60g of CO2 / km by 2020 and 100% of new vehicles entering the fleet emit less than 20g of CO2 / km by 2030.

Moreover, during their annual meeting in May 2017 (Berlin), members formally decided to commit on three additional issues:

- Accessibility (regarding the fleet and regarding the possibility, for disabled persons, to order a taxi)
- Caring for the drivers (training)
- Service to consumers

Clear objectives on these three issues are to be defined before the end of 2017.

Partners and Signatories

Taxis4SmartCities:

Accelerating the introduction of low emission vehicles in taxis fleets by 2020 and 2030 and promote sustainability.

Taxi 24 (Germany), Taxiphone (Suisse), Taxi London (UK), Taxis Bleus (France), Gescop (France), G7 (France) and Cabonline (Sweden & Norway). Taxis Bleus (Belgium), Taxis Verts (Belgium) and Taxi TCA (Netherlands) should join in 2018.

In 2017 Taxis4SmartCities became a formal association with status, an internal code of conduct, a clear organization and a dedicated budget. Such a transformation took some months (the general meeting took place in May 2017 and the "relaunch" is planned in September 2017.) and required members to allow a budget to the initiative.

Relevance to advance the Paris Agreement goals

Adaptation: Taxis4SmartCities is to encourage cities to put in place the mandatory infrastructure (dedicated charging points, access to some restricted areas etc.) for "green taxis", as well as financing supports.

Activities of the Initiative

Outreach and coalition building:

• The new initiative aims at including to have at least one company from one country in the LAC and Asia region to in the coming years.

Knowledge development:

• The Taxis4SmartCities website is was launched in September 2017, with a new logo. This website is to provide information members' actions to abide by their commitments and also on clean transportation around the world, with a focus on the taxis sector.

Monitoring and reporting:

• The CO2 emissions that could be avoided thanks to the application of the commitments will be evaluated ex ante, using the following formula:

'NB OF VEHICLES x NB OF JOURNEYS/YEAR x AVERAGE KM PER JOURNEY x gC02/km EMISSION RATE"

Members are to define the way of monitoring on 1/ Accessibility 2/ Caring for the drivers and 3/ Service to consumers before the end of 2017.

For the coming year, Taxis4SmartCities aims at:

- Gathering new members (3 as a minimum)
- Define clear ambitions on accessibility, caring for the drivers and quality of service to consumers and way of monitoring.
- Communicate on the need, for cities, to create the appropriate infrastructure (dedicated fast charging points, dedicated lines etc.) and financing frame (special advantages for clean vehicles) so that taxis can move faster towards sustainability.

Resources and Focal Point

Initiative website: http://www.taxis4smartcities.org/

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18. Transformative Urban Mobility Initiative

Transformative Urban Mobility Initiative (TUMI)

Objective

The objective of the TUMI is to accelerate the implementation of sustainable urban transport development and mitigation of climate change by mobilizing finance, building capacities and promoting innovative approaches.

Commitment

A transition towards sustainable urban mobility requires a shift in policy making and investment decisions. The Transformative Urban Mobility Initiative (TUMI) will support this transition by mobilizing significant investments in sustainable urban transport infrastructures and services, building the capacity of key decision makers and supporting innovative and transformative sustainable mobility approaches on the ground. Furthermore, TUMI will contribute to an improved dialogue on urban mobility with relevant stakeholders at global, national and local levels, and will increase the awareness of the private sector as well as civil society and help them mobilize to contribute more directly to the development of sustainable mobility solutions.

- ENABLE 1.500 urban change makers to plan and implement modern mobility concepts
- SUPPORT innovative pilot activities in cities across the globe with Global Urban Mobility
 Challenge, 2nd round accepting applications until December 21st. Project topics can cover a
 wide range from active mobility, logistics, new operating models to e-mobility.
- MOBILISE up to 1 billion USD to build and modernize sustainable urban mobility infrastructure

Partners and Signatories

- Asian Development Bank (ADB)
- C40 Cities Climate Leadership Group
- CAF Development Bank of Latin America
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- German Federal Ministry for Economic Cooperation and Development (BMZ)
- KfW Development Bank (Germany)
- ICLEI (Local Governments for Sustainability)
- Institute for Transport and Development Policy (ITDP)
- Partnership on Sustainable Low Carbon Transport (SLoCaT)
- UN Human Settlements Programme UN-Habitat
- World Resources Institute (WRI)

Relevance to advance the Paris Agreement goals

Rising temperatures, rising sea levels, and more frequent extreme-weather events underline the importance of climate-sensitive and -resilient transport services and infrastructures. The transport sector is responsible for 28% of the global final energy consumption and is already the second largest polluting sector. It is the fastest growing sector with regard to GHG emissions. By 2050, transport-related emissions are forecasted to increase by 120%. Resilience strategies support the needed adaptation to future climate related vulnerability. Our target: support our partner cities in building resilient services and infrastructures and reducing greenhouse gas emissions in urban transport.

Transformative Urban Mobility Initiative (TUMI)

Specifically, TUMI will mobilize financing for sustainable mobility – and has committed more than 1 billion USD so far. It has specific goals on finance, pilot projects and capacity building.

Activities of the Initiative

Outreach and coalition building:

• As the leading global implementation initiative focused on urban mobility, we together with 11 global partners support cities in transforming their transport systems.

Capacity building:

- Capacity building is at the core of our ENABLE pillar: Since 2016, we have trained 1,600+
 urban leaders, decision-makers, planners and students in planning and implementing
 sustainable mobility concepts. We continuously support political leaders and change-makers
 in their professional environments by providing tailor-made formats.
- Urban mobility labs, webinars and innovative approaches such as design thinking and peer-to-peer reviews are key elements for TUMI partners to strategically develop, strengthen and conduct capacity building programs for sustainable urban mobility. In April and November 2018, we launched hackathons in Nairobi and Nagpur, with over 50 and 40 entrepreneurs, programers and designers respectively to find digital solutions to mobility challenges.
- TUMI also supports regional network events and study tours such as the ITDP-hosted Mobilize Summit "Making Space for Mobility in Booming Cities" in Dar es Salaam and a Transport Study Tour of the government of Cairo to Bogotá organized in collaboration with TUMI Partner UN Habitat. In 2018, TUMI partners so far have implemented more than 14 capacity building events with 850 participants.

Knowledge development:

- TUMI can draw from the broad knowledge base of its partners with a wealth of publications, training offers and other materials as well as established access to key resource persons and professionals. These elements are used in various formats to build knowledge and support existing efforts among individuals and organizations (cf. <u>TUMI Capacity Development Catalogue 2018</u>).
- At our 2nd TUMI Conference, we kicked off the debate on the role and potential of women in sustainable urban mobility with the first *Women Mobilize Women* Conference. The conference hosted 22 high-level speakers from 18 countries to 200 selected participants, offering an impressive diversity of female transport ministers, politicians, professionals and entrepreneurs from the Global South. Find an overview video of the conference here.

Policy-making and implementation:

- TUMI is only indirectly involved in policy making as it works through mechanisms such as
 capacity development, funding/financing and pilot measures. However, its partners aim at
 including lessons learnt and innovative approaches in policy dialogues and other formats.
 Further, it also supports the implementation of climate mitigation through policy-based
 lending thereby supporting policymaking and implementation of national governments.
- To transform urban mobility visions into reality, we provide funding in-kind services, project implementation support and funding to selected cities. This benefits such diverse activities as

Transformative Urban Mobility Initiative (TUMI)

planning for an integrated cycling system in Addis Ababa, helping establish shared electric mobility in Morocco, or expanding the light rail network in Buenos Aires with KfW and CAF.

Monitoring and reporting:

TUMI impacts are beginning to show and will come out of the first round of challenge winners
as the project awaits its second round from mid-2019 on. As assessed ex ante, the expectable
scaling of activities will produce climate-relevant impacts and contribute to implementing
NDCs. The impact of the initiative will be monitored and reported regularly.

Resources and Focal Point

Website: transformative-mobility.org

Leaflet: https://transformative-mobility.org/wp-content/uploads/2018/10/Global-Urban-Mobility-

Challenge-Flyer.pdf

For more information, to join the initiative as a partner or a beneficiary city/country, contact

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19. UIC Low Carbon Sustainable Rail Transport Challenge

UIC Low Carbon Sustainable Rail Transport Challenge: On the low carbon track

Objective

UIC, the International Railway Association is proposing a transport sector challenge in the framework of the green growth agenda and climate change perspective for 2030 and 2050. This challenge sets out ambitious but achievable targets for improvement of rail sector energy efficiency, reductions in GHG emissions and a more sustainable balance between transport modes.

Commitment

Energy consumption and carbon intensity as a first step of the challenge, the world railway sector has set itself ambitious 2030 and 2050 targets for energy consumption and CO₂ emissions:

- Reduction in specific final energy consumption from train operations: 50% reduction by 2030 (relative to a 1990 baseline) 60% reduction by 2050 (relative to a 1990 baseline)
- Reduction in specific average CO2 emissions from train operations: 50% reduction by 2030 (relative to a 1990 baseline); 75% reduction by 2050 (relative to a 1990 baseline). These targets will be achieved by railway companies across the world through electrification of existing lines, decarbonization of electricity supply, improving load factors, procurement of more efficient rolling stock, energy management systems and efficient driving.8
- Railway share of passenger transport (passenger/km): 50% increase by 2030 (relative to a 2010 baseline) 100% increase (doubling) by 2050 (relative to a 2010 baseline)
- Railway share of freight land transport (tonne/km): equal with road by 2030 50% greater than road by 2050

⁸ The targets were discussed and unanimously approved at the UIC General Assembly on 27 June 2014 (including the major railways of Europe, China, Russia, India & the USA). The targets are informed by the International Energy Agency (IEA) transport analysis and constitute a key component required to achieve the 2 degrees scenario (2DS) referenced also by the International Panel on Climate Change (IPCC).

UIC Low Carbon Sustainable Rail Transport Challenge:

On the low carbon track

Partners and Signatories

The UIC challenge is supported by UIC's 240-member railway companies based in 95 countries worldwide. The Climate Responsibility Pledge was signed by more than 70 members of UIC.

Activities of the Initiative

Outreach and coalition building:

- Organized the Train to Paris and actively contributed to COP22 and COP23 with Members from Morocco and Germany independently organizing Climate Train (Train du climat in Morocco and Train to Bonn)
- Creation of the Climate Responsibility Pledge
- Publication of the yearly Railway Handbook, published with the International Energy Agency (IEA)
- 1st Meeting on Eco scoring hosted on the 12th of November 2018

Capacity building:

- Held workshops on rail adaption in London, Beijing, and Agadir under the RailAdapt Project
- Organized workshops on energy efficiency in the rail sector every year
- Organized workshop on sustainable door to door solution in Warsaw, Poland, 14th of November 2018

Knowledge development:

• Developed the Environment Strategy Reporting System (ESRS)

Monitoring and reporting:

- UIC will monitor and report the progress by the rail sector towards achieving these goals using
 a dedicated Reporting System managed centrally by UIC and externally verified by an
 independent body. Results will be published on yearly basis on a dedicated internet site
 (www.CO2data.org).
- The initiative released the IEA-UIC Handbook 2017 and 2018.
- UIC released a study on the global register of modal shift projects.

Resources and Focal Point

UIC Low Carbon Rail Transport Challenge Action Plan:

http://uic.org/com/IMG/pdf/uic_low_carbon_rail_transport_challenge-action_plan.pdf

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20. Urban Electric Mobility Initiative

Urban Electric Mobility Initiative:

Harnessing technological innovations and better urban planning to promote low carbon transport Objective

The **Urban Electric Mobility Initiative (UEMI)** was initiated by UN-Habitat and the SOLUTIONS project and launched at the UN Climate Summit in September 2014 in New York. The UEMI aims to contribute significantly to the overall goal of limiting the increase in global mean temperature to two degrees Celsius above pre-industrial levels by decreasing urban CO2 emissions globally.

Commitment

UEMI committed to boost the share of electric vehicles in individual mobility (2-3 wheelers and light duty vehicles) and integrate electric mobility into a wider concept of sustainable urban transport that achieves a 30 percent reduction of greenhouse gas emissions in urban areas by 2030.

Partners and Signatories

UN-Habitat and the Wuppertal Institute are hosting the UEMI, partnering with cities, industry actors, and development partners. UEMI is implemented by various EU-funded projects such as SOLUTIONS, EMPOWER and FUTURE RADAR, along with the Urban Pathways project funded by the International Climate Initiative of the German Environment Ministry.

Relevance to advance the Paris Agreement goals

The UEMI provides regular trainings to partner cities to work together on the implementation of sustainable urban mobility measures and offers policy advice, an urban mobility toolkit, eLearning courses and implementation support.

Pilot and demonstration projects are currently being developed for 15 partner cites, covering electric buses, two- und three-wheelers, mini-buses, taxis, e-bikes and sharing systems.

Activities of the Initiative

Outreach and coalition building:

- UEMI is working with cities on the implementation of sustainable urban mobility measures in the context of the New Urban Agenda. As part of urban implementation actions, the UEMI team now works with cities to assess the opportunities for e-mobility concepts in their wider sustainable transport strategy. The current 24 cities engaged in the program have a combined population of over 46 million people covering key emerging economies.
- Besides the 24 cities, more cities will be added in the future to benefit from the Capacity building efforts and implementation action.

Knowledge Building:

- UN-Habitat, the Wuppertal Institute and the Climate Action Implementation Facility jointly host
 the resource center for the UEMI, aiming to bridge the gap between urban energy and
 transport and boosting sustainable transport and urban e-mobility.
- The UEMI resource center provides opportunities for direct collaboration on projects focusing on sustainable urban mobility and the role e-mobility can play in it.

Policy-making and implementation:

- The UEMI pools expertise, facilitates exchange and initiates implementation-oriented actions.
 UEMI works closely with city governments and supports in the development of feasible action plans for pilot projects.
- The UEMI works with the European Road Transport Research Advisory Council (ERTRAC) and the European Green Vehicles Initiative Association (EGVIA) in the context of the FUTURE RADAR project to identify opportunities for business models.

Resources and Focal Point

For more information, please see: http://www.un.org/climatechange/summit/wp-content/uploads/sites/2/2014/09/TRANSPORT-Action-Plan-UEMI.pdf

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21. UITP Declaration on Climate Leadership

UITP Declaration on Climate Leadership:

Supporting our goal to double the market share of public transport by 2025

Objective

Double the market share of public transport by 2025 and implement 350 commitments to climate action made by UITP members

Commitment

Commitment to support governments at all levels by providing them with technical knowledge from delivering action on the ground as this can support delivery of NDC's. It was also a commitment to support monitoring and reporting of SDG implementation (notably SDG target 11.2 on expanding public transport) as this can help the better allocation of resources required for their delivery.

Partners and Signatories

UITP network extends to more than 1,400 companies, over 16,000 contacts from 96 countries.

Relevance to advance the Paris Agreement goals

As part of the Marrakesh Partnership/Global Action Agenda (GCA), the Declaration's goal, which is supported by 1,500 members of UITP, is to double the market share of public transport by 2025 (PTx2). In doing so, it would allow us to cater for ever increasing demand for urban transport while decreasing per capita urban transport emissions by 25% (global average) which would ensure that we would move the transport sector in the direction of the COP 21 Paris Agreement.

The impacts of the 350 actions is outlined in the 2018 report of implementation, of which 86% have been completed.

https://www.uitp.org/sites/default/files/UITP%20DECLARATION%20ON%20CLIMATE%20LEADERSHIP%202018%20REPORT%20OF%20IMPLEMENTATION%20FINAL.pdf

Activities of the Initiative

Outreach and coalition building:

In 2018:

- Partnership Agreement with UNFCCC for COP24
- Partner of the Climate and Clean Air Coalition

Capacity building:

 Workshops, trainings, study tours and conference (circa. 200 days) will have been held over 2018 that will help scale up quality public transport interventions.

Knowledge development:

• 2 UNFCCC recognized Talanoa Dialogues – Dakar, Senegal (April) and Milan, Italy (October) *Policy-making and implementation:*

• Guidelines and tender structure recommendations that will help to scale up low emissions buses systems. This report made available to relevant parties to the UNFCCC convention prior to COP 24.

Monitoring and reporting:

2018 report on implementation of actions pledged under the UITP Declaration. Of the 350 actions pledged by UITP members at the 2014 UN Climate Summit, examples of implementation could be reported in 86% of cases in 2018. An increase of 25% compared with this time last year, representing over 300 projects.

UITP Declaration on Climate Leadership:

Supporting our goal to double the market share of public transport by 2025

Sustainable Development Goals:

- Support the development Sustainable Mobility for All (SUM4ALL) initiative on urban access, which has at its core SDG 11.2.
- Support technical guidance on measuring Sustainable Development Goals (SDGs) which targets expanding public transport (SDG11.2) at the 2018 HLPF.
- Integrate SDGs into the EU New Urban Agenda on sustainable mobility.

Resources and Focal Point

UITP Action Plan: http://www.un.org/climatechange/summit/wp-content/uploads/sites/2/2014/09/TRANSPORT-Action-Plan-UITC.pdf

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22. ZEV Alliance

ZEV Alliance:

Accelerating global zero-emission vehicle adoption

Objective

The International Zero-Emission Vehicle Alliance (ZEV Alliance) is a collaboration of governments acting together to accelerate the adoption of zero-emission vehicles (electric, plug-in hybrid, and fuel cell vehicles).

Commitment

The ZEV Alliance works to accelerate the adoption of zero-emission vehicles (ZEVs), including electric vehicles, plug-in hybrids, and fuel-cell vehicles, to achieve national and subnational climate change commitments. The governments announced that they will strive to make all passenger vehicle sales in their jurisdictions ZEVs by no later than 2050 and to collaboration on policies and actions to achieve their ZEV targets.

Partners and Signatories

Baden-Württemberg, British Columbia, California, Connecticut, Germany, Maryland, Massachusetts, the Netherlands, New York, Norway, Oregon, Québec, Rhode Island, United Kingdom, Vermont, and Washington are ZEV Alliance members.

Activities of the Initiative

Outreach and coalition building:

The participants will continue to set ambitious, achievable targets for ZEV deployment, take
actions to achieve those targets as appropriate in each jurisdiction, act together to achieve
individual and collective targets, and encourage and support other jurisdictions in setting and
achieving ambitious ZEV targets. The governments meet regularly to support their ongoing
policy and technology developments in the respective jurisdictions and direct new work to
establish global best practices to support ZEVs.

Capacity building:

 The ZEV Alliance member governments have continued to meet on a monthly basis to collaborate on wide-ranging policy and technical questions related to ZEV consumer incentives, electric power utility practices, consumer awareness programs, zero-emission transport

ZEV Alliance:

Accelerating global zero-emission vehicle adoption

technologies beyond road vehicles, charging infrastructure, and shared mobility business models to accelerate ZEV deployment. The ZEV Alliance, with several prospective new member governments, met in person in London in May 2018 to chart out its priorities, ongoing activities, and plans to continue the implementation of the ZEV Alliance's commitments in 2018 and 2019. The ZEV Alliance also convened several public meetings (webinar on fast charging best practices, international meetings in San Francisco and Shanghai) to increase its outreach.

Knowledge development:

• The ICCT has prepared and published reports for the ZEV Alliance that summarize the ZEV Alliance exchange and the latest technology and policy research. The "Lessons learned on early electric vehicle fast-charging deployments" summarizes leading global practices to install fast charging to support ZEV growth. The report "Beyond road vehicles: Survey of zero-emission technology options across the transport sector" assesses zero-emission technologies to decarbonize maritime, aviation, and non-road transport modes. The report "Accelerating the transition to ZEVs in shared and autonomous fleets," analyzes barriers, costs, and policies related to increasing the deployment of zero-emission vehicles in ride-hailing and autonomous fleets.

Policy-making and implementation:

• The ZEV Alliance's 16 governments have sustained and expanded many dozens of ZEV support policies throughout 2018, including new and continued ZEV consumer incentives, continued regulatory support for ZEV deployment, increased ZEV electric charging and hydrogen refueling infrastructure deployment, increased activities to promote electric power utility support for ZEVs, increased demonstration and planning activities to transition toward zero-emission freight trucks, and increased public ZEV public education and awareness campaigns.

Resources and Focal Point

ZEV Alliance website: www.ZEVAlliance.org

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