# CONTRIBUTION OF TRANSPORT COMMITMENTS TO GLOBAL GOALS ON SUSTAINABLE DEVELOPMENT





# Contribution of Transport Commitments to Global Goals on Sustainable Development 2015 Transport Commitments Report

Partnership on Sustainable, Low Carbon Transport (SLoCaT) September 2015

## **Preface**

"Sustainable Transport matters when it comes to improving people's lives." This, together with: "The transport sector is taking important action to address the two key global policy processes of 2015: sustainable development and climate change" are major findings of the 2015 SLoCaT Transport Commitments Report.

The transport sector is making valuable contributions to advancing sustainable development and addressing climate change. It is in recognition of this fact that the Partnership on Sustainable, Low Carbon Transport (SLoCaT) has put its weight behind developing a series of voluntary commitments on sustainable transport, and monitoring their progress and follow-up.

The commitment process began with the United Nations Conference on Sustainable Development (Rio+20) in 2012, when SLoCaT helped to develop the first set of voluntary transport commitments to complement the formal negotiated outcome of the conference. This was followed by a second set of commitments in 2013 focusing largely on the measurement of sustainable transport initiatives. In 2014, SLoCaT helped to convene key members of the global transport community in support of Secretary General Ban Ki-moon's Climate Summit, which triggered a new set of climate change-focused voluntary transport commitments. Now, in the lead up to the COP21 conference in December 2015, SLoCaT (at the invitation of the Lima Paris Action Agenda) is helping to advance a group of emerging commitments on low carbon transport.

Much progress has been made since we published the first status report on voluntary commitments – Creating Universal Access to Safe, Clean and Affordable Transport – in 2013. Since then, the number of core commitments has doubled to 34, and the number of organizations involved in implementing the commitments has increased to more than 100. Significantly, all but one of the commitments are still active and undertaking crucial actions to scale up sustainable transport infrastructure and services, and supportive policies and tools.

The 2015 report analyzes the contribution that voluntary transport commitments are making to the Global Goals on Sustainable Development that will guide global action on development in the next 15 years. This analysis shows strong linkages between the transport commitments and the post-2015 development agenda, which can provide further impetus to the transport sector to further implementation of these commitments.

We would like to thank each of the voluntary transport initiatives for their participation in this report and for their ongoing efforts to further their commitments. We hope that the critical mass of actions on sustainable transport documented in this report will inspire a broader set of voluntary commitments to improve people's lives through sustainable transport.

The development of this report was coordinated by Karl Peet, SLoCaT Research Director, and Alice Yiu, SLoCaT Program Manager, with valuable contributions from SLoCaT research assistants Alexandra Erfort and Samantha Wong. SLoCaT would like to thank Rayce Tugano and the Design Muscle team for meeting our challenging deadlines in producing the final report.

#### **Cornie Huizenga**

Secretary General
Partnership on Sustainable, Low Carbon Transport

# **Executive Summary**

A global expansion of sustainable transport infrastructure and services is fundamental to the realization of sustainable development and climate change goals. 2015 is a critical year for these global processes, with two parallel processes to set out quantified targets and indicators to guide the directions for sustainable development and climate change action in the next 15 years: the Post-2015 Development Agenda to be finalized with the adoption of 17 Sustainable Development Goals (SDGs) in September 2015 and an anticipated global agreement on climate change expected to be reached in December 2015.

Sustainable transport plays a critical, cross-cutting role to facilitate the achievement of a wide range of economic, social and environment-oriented SDGs, and any attempt to achieve reductions in greenhouse gas (GHG) emissions that are required to maintain a two-degree scenario (2DS)¹ without active involvement from the transport sector is destined to fall short. Thus, it is clear that progress toward transport commitments made by the transport sector in the context of the 2012 United Nations Conference on Sustainable Development (Rio+20) as well as Secretary General Ban Ki-moon's 2014 Climate Summit will determine transport's ability to contribute to sustainable development and climate change goals from now until 2030.

The transport sector is not represented by a single, standalone goal within the SDG framework, but rather is distributed across a number of separate goals related to health, energy, infrastructure, urban issues, and climate change, among others. A SLoCaT Partnership analysis has determined that the SDG framework includes at least five targets that are directly impacted by transport, and at least seven targets that are indirectly impacted by transport, as shown in Figure 1.

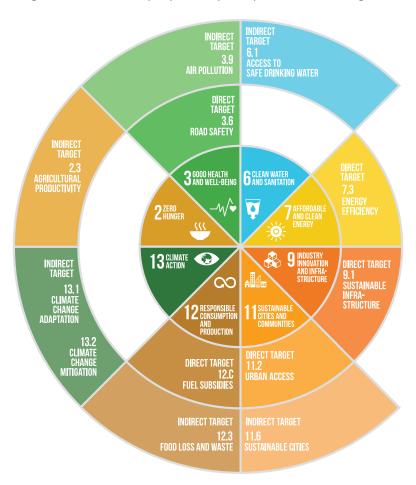


Figure 1. Transport targets and Global Goals on Sustainable Development

The SLoCaT Partnership and the global sustainable transport community are continuing active efforts to promote the integration of sustainable transport in the context of the post-2015 development agenda, as it moves from the development to the implementation phase, and to build an enabling global institutional framework for sustainable transport, based on the SLoCaT

<sup>1</sup> International Energy Agency. 2014. Energy Technology Perspectives 2014. http://bit.ly/1UTSOPH

Results Framework on Sustainable Transport<sup>2</sup> (i.e. to advance sustainable development goals) and the Paris Process on Mobility and Climate (PPMC)<sup>3</sup> (i.e. to promote more ambitious action on transport and climate change).

To meet these goals and targets on sustainable development and climate change, the sustainable transport community must continue to work with a wide range of stakeholders. These stakeholders include local and national governments, multilateral development banks (MDBs), civil society organizations,— and increasingly the business sector— to meet the challenge to improve access to goods, jobs, markets and services in both urban and rural contexts. This can be achieved by taking a balanced 'avoid-shift-improve' approach to expanding needed transport infrastructure and services, which encompass strategies to reduce unnecessary transport trips, to increase use of public and non-motorized transport, and to improve the environmental performance of transport. The long-term benefits of such an approach are significant and varied, including more sustained economic growth, improved public health outcomes, increased road safety, and enhanced social equality at local and global levels.

A key part of these efforts is the growing number of voluntary transport commitments, which originally began with the core group of commitments made at the Rio+20 summit in 2012, and have been steadily expanded through a subsequent set of Rio follow-on commitments in 2013, a series of additional transport related commitments at the Secretary-General's (SG's) Climate Summit in 2014, and a number of emerging initiatives through the Lima-Paris Action Agenda (LPAA) and other avenues in 2015.

These voluntary commitments cover a range of sustainable transport topic areas including public and non-motorized transport; fuel and vehicle efficiency; roads and road safety; freight and logistics; urban planning and infrastructure; and policy and analysis. Recent and emerging climate change commitments have expanded the original scope of the commitments to new areas such as electric mobility, airports, inland shipping, and ITS, among others. An important observation is that, with the exception of one of the original Rio+20 commitments, all of the other 34 voluntary commitments are still active.

In addition to the 'supply-side' commitments (i.e. those defining and implementing strategies to achieve sustainable development and climate change objectives taken by the transport sector itself) described above, this report also considers 'demand-side' commitments from cities (through a number of cooperative initiatives) and countries (through the emergence of intended nationally-determined contributions (INDCs)). These city and country commitments, though different in nature from the Rio+20 and Climate Summit commitments, offer opportunities through the commitments initiated by the transport sector for accelerated action on sustainable transport at municipal and national levels.

A qualitative analysis shows that voluntary transport commitments contribute significantly to both the direct and indirect transport targets in the post-2015 SDG framework, as shown in Table 1 and Table 2 (based on the correlation of commitments and targets in Annex II):

	Direct Transport Targets					
Transport Commitments	3.6: Road Safety	7.3: Energy Efficiency	9.1: Sustainable Infrastructure	11.2: Urban Access	12.c: Fuel Subsidies	
Rio+20 Commitments (2012)						
Follow-on Commitments (2013)						
Climate Summit Commitments (2014)						
Emerging Commitments (2015)						
Overall						

Table 1. Correlation between transport commitments and direct SDG targets<sup>4</sup>

<sup>2</sup> Partnership on Sustainable, Low Carbon Transport. 2014. Results Framework on Sustainable Transport. http://www.slocat.net/resultsframework

<sup>3</sup> Paris Process on Mobility and Climate. http://www.ppmc-cop21.org

<sup>4</sup> The level of correlation between the transport commitments and the direct transport targets are calculated based on the scoring given in Annex II

A significant majority of commitments in each category contribute to the SDG direct transport targets in the areas of sustainable transport infrastructure (Target 9.1) and urban access (Target 11.2), and to a somewhat lesser extent, energy efficiency (Target 7.3). Among direct transport targets, targets on road safety (Target 3.6) and fossil fuel subsidies (Target 12.c) have received relatively less attention than the direct transport targets mentioned in the previous point.

	Indirect Transport Targets						
Transport Commitments	2.3: Agricultural Productivity	3.9: Air Pollution	6.1: Access to Safe Drinking Water	11.6: Sustainable Cities	12.3: Food Loss and Waste	13.1: Climate Change Adaptation	13.1: Climate Change Mitigation
Rio+20 Commitments (2012)							
Follow-on Commitments (2013)							
Climate Summit Commitments (2014)							
Emerging Commitments (2015)							
Overall							

Table 2. Correlation between transport commitments and indirect SDG targets<sup>5</sup>

Level of Correlation:		
Very Weak		
Weak		
Moderate		
Strong		
Very Strong		

Among indirect transport targets, those focusing on reducing impacts to air quality (Target 3.9) and sustainable cities (11.6) are addressed by a significant majority of commitments. Rural transport issues are underrepresented among transport commitments, with relatively few commitments focused on agricultural productivity (Target 2.3), access to drinking water (Target 6.1), or reducing food waste (Target 12.3).

Climate Summit transport commitments from 2014 and 2015 are as expected strongly focused on climate change mitigation but give relatively less attention to climate change adaptation.

Significant in the case of both direct and indirect transport related targets is the contribution of climate change oriented commitments, which is almost as high as the contribution of sustainable development oriented commitments.

The transport commitments take a wide variety of implementation approaches to advancing sustainable transport infrastructure and services through the post-2015 development and climate change frameworks, as shown in Table 3. There is an overall emphasis here on upstream activities (e.g. building partnerships, policy development, capacity building, collecting data and developing tool kits) with a somewhat lesser focus on implementation, especially in the area of financing.

Name of Commitment	Strengthening Partnerships	Policy Implementation and Standards	Capacity Building	Development of Tool Kits	Data Collection and Monitoring	Financial Support	Pilot or Full-Scale Project Implementation
Original Rio+20 Commitments (2012)	9	12	7	5	4	2	5
Post-Rio+20 Commitments (2013)	3	4	2	0	4	0	0
Climate Summit Commitments (2014)	4	4	5	3	3	0	5
Emerging Initiative (2015)	5	6	5	2	1	0	4
Total Number of Commitments	21	26	19	10	12	2	14

**Table 3. Transport commitments implementation approaches** 

<sup>5</sup> The level of correlation between the transport commitments and the indirect transport targets are calculated based on the scoring given in Annex II

Voluntary transport commitments have a role to play not only in establishing goals, but also in tracking progress toward a broad set of commitments within the global SDG and climate change frameworks. Voluntary transport commitments have the potential to help address these challenges through both (a) developing methodologies and indicators and (b) collecting information that contributes to the actual measurement of these indicators. Existing transport commitments are taking steps in both of these directions.

Together, the scope and coverage of these commitments address all transport sub-sectors in both developed and developing countries. Potential impacts from full implementation of the various commitments are significant. It is estimated that at least one out of two transport trips to be made in 2025 will be affected by these collective commitments if they are implemented successfully. Furthermore, the shift to low-carbon mobility, embodied in part by these commitments, could save up to \$70 trillion in fuel costs, as estimated by the International Energy Agency.<sup>6</sup>

While it is still too early to make an full assessment of the likelihood that these commitments will achieve their goals and targets (set, in most cases, for 2030), this report helps to establish a starting point for progress of the transport sector relative to the adoption of SDGs, and to establish the extent to which transport related commitments can help to achieve the SDGs and associated climate targets. Importantly, this report can help to build a foundation for work in the next several years to translate an aspirational global roadmap to more tangible national strategies to ensure success in achieving critical sustainable development goals and climate change targets.

Transport commitments have yielded measurable impacts in a short period of time, but it is possible to further increase ambition and maximize effectiveness of these initial commitments. The transport commitments approach, aided by a series of high-level global events from 2012-2015, has demonstrated the potential to accelerate much-needed actions on climate change and sustainable development by non-state actors in the transport sector, and to give transport a stronger voice in global processes on sustainable development and climate change. However, the current ad-hoc mechanism in developing the transport commitments has certain weaknesses. There is an obvious danger that organizations enter into transport commitments in order to make a temporary impression, without giving proper consideration to the long-term implications of these commitments.

To increase the effectiveness of the current transport commitment approach, the following could be considered:

- Create a mechanism to identify gaps in sustainable development and climate change frameworks, and define cooperative commitments for the transport sector to address these gaps (e.g. a relatively weak focus on rural issues);
- Create supportive mechanisms to provide sufficient funding to allow transport commitments to maintain and increase ambition over time;
- Align transport commitments on a regular basis to create a consistent and predictable timeframe for review, renewal, and repackaging, and to increase the potential for increased coordination and cooperation;
- Increase attention to policy change in forthcoming commitments to ensure that they both drive and are driven by supportive policies; and
- Use ongoing political processes to highlight progress toward current and ongoing transport commitments, rather than as a primary forum to generate new commitments.

<sup>6</sup> Joint Action Statement for the Transport Action Area. 2014. http://bit.ly/1KRpObV

## **List of Abbreviations**

ACI Airports Council International
AfDB African Development Bank
ADB Asian Development Bank

AFD Agence Française de Développement
ASEAN Association of Southeast Asian Nations

ASI Avoid-Shift-Improve

Association pour le développement des Transports, de l'Environnement, et de la Circulation

**BAU** Business-As-Usual

BAQ The Integrated Conference of Better Air Quality

**BRIC** Brazil, Russia, India and China

BRT Bus Rapid Transit
CAA Clean Air Asia

**CAF** Development Bank of Latin America

**CCAITN** Climate Change Adaptation for International Transport Networks

CEPA California Environmental Protection Agency

**CO**, Carbon dioxide

**CODATU** Cooperation for Urban Mobility in the Developing World

COP Conference of the Parties
C40 Cities Climate Leadership Group

**EBRD** European Bank for Reconstruction and Development

ECE Economic Commission for Europe
ECF European Cyclists' Foundation
EIB European Investment Bank

**EMBARQ** WRI Ross Center for Sustainable Cities (formerly EMBARQ)

**EST** Environmentally Sustainable Transport

**ESC** European Shippers' Council

**EU** European Union

**EuDA** European Dredging Assocaition

**EV** Electric Vehicle

**For Future Inland Transport Systems** 

GBD Global Burden of Disease
GDP Gross Domestic Product
GEF Global Environment Facility

**GENUS** The Global Energy Network for Urban Settlements

**GFE** Green Freight Europe

**GFEI** Global Fuel Economy Initiative

**GHG** Greenhouse gas

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

GMS Greater Mekong Sub-region
GRSF Global Road Safety Facility

**Gt** Gigaton

GTF Global Tracking Framework

G20 Group of Twenty
G8 Group of Eight

**HLAGST** High-level Advisory Group on Sustainable Transport

**HLP** High Level Panel

IAEG-SDGs Inter-agency and Expert Group on Sustainable Development Goal Indicators

IAPHInternational Association of Ports and HarborsICCTInternational Council on Clean TransportationICLEIICLEI - Local Governments for SustainabilityICTInformation and communication technologies

IDB Inter-American Development Bank
IEA International Energy Agency

IFRTD International Forum for Rural Transport and Development

IHMA International Harbour Masters' Association

IMF International Monetary Fund

IMPA International Maritime Pilots' Association
INDC Intended nationally-determined contribution
IPCC Intergovernmental Panel on Climate Change
IRAP International Road Assessment Programme
IRU International Road Transport Union

IRU International Road Transport Union

IsDB Islamic Development Bank

ITDP Institute for Transportation and Development Policy

ITF International Transport Forum
ITS Intelligent Transportation System

ITS-Davis Institute of Transportation Studies, University of California, Davis

ITS World Congress

KOTI The Korea Transport Institute IAC Latin America and the Caribbean **LPAA** Lima-Paris Action Agenda I PI **Logistics Performance Index MDB** Multi-lateral Development Bank MDG Millennium Development Goal MOE Ministry of Environment Means of Implementation MOI

MONRE Ministry of Natural Resources and Environment

**MOT** Ministry of Transport

NAMA Nationally Appropriate Mitigation Action

NGO Non-governmental organization
NMT Non-Motorized Transport

**NUTP** National Sustainable Urban Transport Policies

**OECD** Organization for Economic Cooperation and Development

PCFV Partnership for Clean Fuels and Vehicles
PPMC Paris Process on Mobility and Climate

**PIANC** World Association for Waterborne Transport Infrastructure

Rio+20 United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil in June 2012

(20 years after 1992 Earth Summit in Rio de Janeiro)

SDG Sustainable Development Goal SEAP Sustainable Energy Action Plan

**SG** Secretary-General

**SLoCaT** Partnership on Sustainable, Low Carbon Transport

STAR Sustainable Transport Appraisal Rating

SE4All Sustainable Energy for All
SUMP Sustainable Urban Mobility Plan
SUTP Sustainable Urban Transport Project
TDM Travel Demand Management

TEST Tracking Environmentally Sustainable Transport

TOD Transit-Oriented Development
TRL Transport Research Laboratory
TWG Technical Working Group

**UEMI** Urban Electric Mobility Vehicles Initiative

**UIC** International Union of Railways

**UITP** International Association of Public Transport

**UMO** Urban Mobility Observatory

**UN** United Nations

**UNCRD** United Nations Centre for Regional Development

**UN-DESA** United Nations Department of Economic and Social Affairs

**UNDP** United Nations Development Programme

**UNECE** United Nations Economic Commission for Europe

**UNEP** United Nations Environment Programme

**UNFCCC** United Nations Framework Convention on Climate Change

**UN-HABITAT** United Nations Human Settlements Programme

UNICEF United Nations Children's Fund

**UNIFE** Association of the European Rail Industry

UNSD United Nations Statistical Division
UNRA Uganda National Roads Authority

VC Vancouver Enterprise Forum

WB World Bank

WCA World Cycling Alliance WHO World Health Organization

WMO World Meteorological Organization

ZEV Zero-Emission Vehicle
2DS Two-degree scenario

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### Section I.

# Transport Sector in the Post-2015 Development Agenda and Climate Change Framework

"By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons."

Sustainable Development Goals, Target 11.2, Transforming Our World: The 2030 Agenda for Sustainable Development, 2015

"Measures that reduce the demand for travel, including compact city planning combined with the large-scale expansion of public transport systems improvements in energy-efficient transportation systems along with the promotion of non-motorized transport, could save governments, companies and individuals up to \$70 trillion by 2050, as less money would need to be invested in vehicles, fuel and transportation infrastructure."

Joint Action Statement Transport Secretary-General's Climate Summit, 20147

#### **Global Frameworks on Sustainable Development and Climate Change**

2015 is a historical milestone for the two major global processes on sustainable development and climate change, as (a) the Post -2015 Development Framework and a final list of Sustainable Development Goals (SDGs, also known as the Global Goals for Sustainable Development) are to be adopted by the United Nations (UN) General Assembly in September 2015, and (b) a global agreement on climate change is expected to be reached at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015. These international processes will set out both qualitative and quantitative targets to guide directions for sustainable development and climate change action in the next 15 years, with the goal of achieving needed progress in these areas by the target year of 2030. Secretary General Ban Ki-Moon has referred to sustainable transport as a "common thread" that links both of these processes.<sup>8</sup>

#### **Transport and Sustainable Development Goals**

On the side of the Post-2015 agenda, intergovernmental negotiations have been focusing on the adoption of a final list of sustainable development goals, targets and indicators, their means of implementation (MOI) and a new Global Partnership for Development; and a framework for follow-up and review of forthcoming implementation. In the SDG<sup>9</sup> framework, sustainable transport is not represented by a standalone sustainable development goal; instead it is mainstreamed in a direct or indirect manner into many of the proposed SDGs, especially those related to food security, health, energy, infrastructure, cities and human settlements and climate change. Transport services are essential to achieving most, if not all, SDGs, as demonstrated in Figure 2.<sup>10</sup>

<sup>7</sup> UN. 2014. Action Areas/ Summit Announcements at the Climate Summit. http://bit.ly/1sjFCLd

<sup>8</sup> Ban Ki-Moon, 2015. International Transport Forum 2015 Summit on 27-29 May 2015. http://bit.ly/1QEBvS8

<sup>9</sup> This report refers to the term Sustainable Development Goals (SDGs) for the Global Goals on Sustainable Development.

<sup>10 2015.</sup> Issues brief Prepared by the Technical Advisory Group for Information of the Secretary-General's High-Level Advisory Group on Sustainable Transport. http://bit.ly/1MqFinh

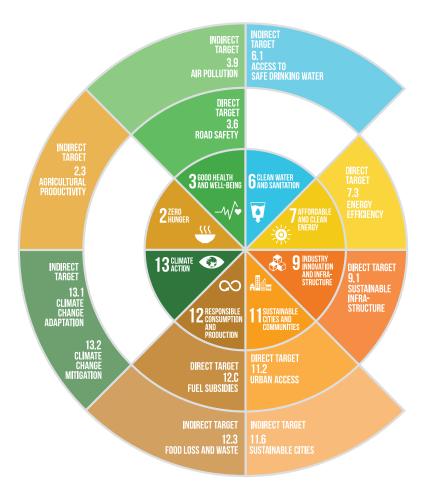


Figure 2. Direct and indirect transport targets in Sustainable Development Goals

The final text for adoption of the SDGs¹¹ states that "sustainable transport systems, along with universal access to affordable, reliable, sustainable and modern energy services, quality and resilient infrastructure, and other policies that increase productive capacities, would build strong economic foundations for all countries" (para 27). The text includes five targets that the Partnership on Sustainable, Low Carbon Transport (SLoCaT) has determined to be directly related to the transport sector; in addition, sustainable transport is indirectly related to seven other targets under the draft SDGs for adoption, as shown in Table 4 and Table 5.

Direct Transport Targets of the Sustainable Development Goals	
3. Ensure healthy lives and promote well-being for	3.6 By 2020, halve the number of global deaths and injuries from
all at all ages	road traffic accidents (Road safety)
7. Ensure access to affordable, reliable, sustainable	7.3 By 2030, double the global rate of improvement in energy
and modern energy for all	efficiency (Energy efficiency)
9. Build resilient infrastructure, promote inclusive	9.1 Develop quality, reliable, sustainable and resilient infrastructure,
and sustainable industrialization and foster	including regional and transborder infrastructure, to support economic
innovation	development and human well-being, with a focus on affordable and
	equitable access for all (Sustainable infrastructure)
11. Make cities and human settlements inclusive,	11.2 By 2030, provide access to safe, affordable, accessible and
safe, resilient and sustainable	sustainable transport systems for all, improving road safety, notably
	by expanding public transport, with special attention to the needs
	of those in vulnerable situations, women, children, persons with
	disabilities and older persons (Urban access)

Transforming Our World: The 2030 Agenda for Sustainable Development- Finalized text for adoption--August 2015 http://www.slocat.net/un-general-assembly-negotiations-sdgs-january-september-2015

Direct Transport Targets of the Sustainable Development Goals	
12. Ensure sustainable consumption and production patterns	12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities (Fuel subsidies)

#### **Table 4. Direct transport targets of the SDGs**

The proposed targets on road safety (Target 3.6); energy efficiency (Target 7.3); sustainable infrastructure (Target 9.1), urban access (Target 11.2), and fossil fuel subsidies (Target 12.c) emphasize that sustainable transport is not needed solely for its own sake, but rather is essential to facilitate the achievement of a wide variety of SDGs. Transport needs to be more sustainable to minimize road injuries and fatalities, and to reduce greenhouse gas (GHG) emissions. Transport makes it possible for goods to be shipped from production zones to markets and international gateways. In short, without sufficient sustainable transport infrastructure and services across the world's regions, at least half of the proposed SDGs are at risk of not achieving their potential.

Indirect Transport Targets of the Sustainable Development Goa	ls .
2. End hunger, achieve food security and improved	2.3 By 2030, double the agricultural productivity and
nutrition and promote sustainable agriculture	incomes of small-scale food producers, in particular women,
	indigenous peoples, family farmers, pastoralists and fishers,
	including through secure and equal access to land, other
	productive resources and inputs, knowledge, financial services,
	markets and opportunities for value addition and non-farm
	employment(Agricultural productivity)
3. Ensure healthy lives and promote well-being for	3.9 By 2030, substantially reduce the number of deaths and illnesses
all at all ages	from hazardous chemicals and air, water and soil pollution and
	contamination (Air pollution)
6. Ensure availability and sustainable	6.1By 2030, achieve universal and equitable access to safe and
management of water and sanitation for all	affordable drinking water for all (Access to safe drinking water)
11. Make cities and human settlements inclusive,	11.6 By 2030, reduce the adverse per capita environmental impact
safe, resilient and sustainable	of cities, including by paying special attention to air quality and
	municipal and other waste management (Sustainable cities)
12. Ensure sustainable consumption and	12.3 By 2030, halve per capita global food waste at the retail and
production patterns	consumer levels and reduce food losses along production and supply
	chains, including post-harvest losses (Food loss and waste)
13. Take urgent action to combat climate change	13.1 Strengthen resilience and adaptive capacity to climate-
and its impacts	related hazards and natural disasters in all countries (Climate
	change adaptation)
	13.2Integrate climate change measures into national policies,
	strategies, and planning (Climate change mitigation)

#### **Table 5. Indirect transport targets of SDGs**

Transport also indirectly contributes to other proposed targets on agricultural productivity (Target 2.3), air pollution (Target 3.9), access to safe drinking water (Target 6.1), sustainable cities (Target 11.6), reduction of food loss (Target 12.3), climate change adaptation (Target 13.1) and climate change mitigation (Target 13.2). Safe and affordable transport services and infrastructure in remote areas is an indispensable component to help people, especially the minority groups, to access jobs, health facilities and educational opportunities while providing better supply chain to ensure that crops are delivered efficiently to prevent food loss.

#### **Transport and Climate Change**

Transport has an important contribution to make toward climate change targets as well. Emissions from transport are projected to rise 70% between 2010 and 2050 in a business-as-usual (BAU) scenario, making it the fastest growing source of GHG emissions. Pearly all of this growth will take place in emerging and developing economies, and can be attributed to a growth in both passenger and freight transport.

A recent SLoCaT analysis reveals that in 40% of countries worldwide, the transport sector is the largest source of energy related GHG emissions, and in most remaining countries, it is the second largest source of energy related GHG emissions.<sup>13</sup>

The Intergovernmental Panel on Climate Change (IPCC)'s Fifth Assessment Report<sup>14</sup> stresses increased certainty and severity of climate change impacts and states a higher mitigation potential for transport than in previous assessments. The International Energy Agency (IEA) supports IPCC's claim and concludes that technological and behavioral measures can decrease energy demand for urban transport by at least 55% below an IEA-defined baseline for a 4 degree Celsius scenario (4DS).<sup>15</sup> The emission reduction potential of the transport sector is further confirmed in the 2015 IEA World Energy Outlook Special Report.<sup>16</sup>

The United Nations Environment Programme (UNEP)'s 2014 Emissions Gap Report<sup>17</sup> estimates that the transport sector has the potential to contribute up to 3 Gt  $CO_2$ e annually to needed reductions in support of the 2DS target<sup>18</sup>, through a combination of transport demand reduction, modal shift, and system efficiencies. Thus, the transport sector must do its part to deliver these reductions to help close the gap.

A joint analysis by the University of California, Davis and the Institute for Transportation and Development Policy (ITDP)<sup>19</sup> assesses the impact of decreased future growth of private vehicles and increased emphasis on public transport, walking and cycling. This proposed "High Shift Scenario" would yield potential reductions of about 1.7 gigatons of carbon dioxide annually—a 40% reduction of urban passenger transport emissions—and would cut these emissions cumulatively by about a quarter by 2050. At the same time this scenario could result in potential savings of more than US\$ 100 trillion in public and private capital and operating costs of urban transportation between now and 2050.

Throughout 2015, party members to the UNFCCC have started to submit their Intended Nationally Determined Contributions (INDCs) to showcase planned post 2020 mitigation actions to tackle climate change. INDCs are poised to play an integral role in the negotiations leading up to COP21 and are intended to communicate country targets and strategies to reduce carbon emissions for the post-2020 period. A SLoCaT analysis<sup>20</sup> indicates that almost all the INDCs submitted to date specify that the transport sector will be part of their mitigation efforts in reducing emissions. A number of countries have set specific emission targets for the transport sector, and a growing list of countries are detailing transport related actions in an overview of proposed mitigation measures<sup>21</sup>.

In summary, the transport sector is critical in ongoing efforts to reduce climate change, and actions in sustainable transport development will certainly address both the SDG and the climate change processes.

# Potential of transport to contribute to sustainable development and climate change priorities

To realize a transformative change in the transport sector and create more inclusive access, mainstream transport policy will need to shift from an emphasis on building roads to move cars and trucks, to an emphasis on building transport systems that move people and goods in a more sustainable manner. There is growing agreement among transport policy specialists and planners on the need to deploy three interlinked strategies – "Avoid," "Shift," and "Improve" – to realize inclusive access to jobs, goods and services.

<sup>12</sup> OECD-IEA. 2013. A Tale of Renewed Cities. A policy guide on how to transform cities by improving energy efficiency in urban transport systems. http://bit.ly/1DmurV0

<sup>13 2015.</sup> SLoCaT Review of World Energy Outlook Special Report on Energy and Climate Change. http://www.slocat.net/news/1499

<sup>14</sup> Intergovernmental Panel on Climate Change. Fifth Assessment Report AR5. http://www.ipcc.ch/report/ar5

<sup>15</sup> Bridging the Gap Initiative. 2014. Land Transport's Contribution to a 2 Degree Target. http://bit.ly/1il6Gkf

<sup>16</sup> IEA, 2015, Energy and Climate Change - World Energy Outlook Special Report. http://bit.ly/1FW2d1Y

<sup>17</sup> UNEP. 2014. The Emissions Gap Report. http://bit.ly/1BQ40se

<sup>18</sup> Bridging the Gap Initiative. 2014. Land Transport's Contribution to a 2C Target. http://bit.ly/liuiPJG

<sup>19</sup> Replogle, Michael, and Lewis M. Fulton. A Global High Shift Scenario. http://bit.ly/1qKZpSu

<sup>20</sup> SLoCaT Partnership. 2015. 57% of Global Transport Emissions covered by Current INDC's. http://www.slocat.net/news/1541

<sup>21</sup> INDC Submissions. http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx

The development of transport infrastructure and services must be guided by the "Avoid-Shift-Improve (ASI)" approach, which calls for: (a) **Avoiding** the need for unnecessary motorized trips through smarter land use and logistics planning; (b) **Shifting** the transport of goods and persons to the most efficient mode<sup>22</sup>; and (c) **Improving** the efficiency and environmental performance of transport systems through improved vehicle, fuel, and network operations and management technologies. To enable the successful implementation of the Avoid-Shift-Improve approach, it is important to strengthen institutional and regulatory frameworks and build organizational capacity.

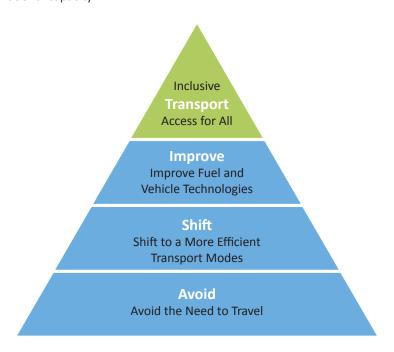


Figure 3. Sustainable transport paradigm

The Avoid-Shift-Improve approach has universal applicability and is equally relevant for the developed and the developing world. In the case of the developed world, most countries are working with a mature vehicle fleet, and thus the emphasis in infrastructure planning is likely to focus on replacing and maintaining existing infrastructure rather than creating new infrastructure, which is likely to result in a greater emphasis on "Shift" and "Improve" measures. In the developing world, where there is a great need for new transport infrastructure and services, and where urbanization is proceeding most rapidly, there is likely to be greater opportunity for successful "Avoid" and "Shift" measures; however, "Improve" measures will be important as well to counter the impacts of rapid motor vehicle fleet growth in the developing world.

A number of illustrative examples of the application of ASI principles (which represent only a sample of possible ASI measures) demonstrate a growing number of proven sustainable transport solutions that have the capacity to deliver inclusive access. In many cases these solutions will have multiple benefits, including improved access, reduced congestion, improved road safety, cleaner air and reduced GHG emissions.

#### **Transport Demand Management Policies**

The rapid growth in the number of vehicles has worsened the problem of congestion problem in many cities. Some countries, such as Singapore<sup>23</sup> and China<sup>24</sup>, have introduced a vehicle quota system for new vehicle registrations to control the number of cars being added. Such systems can regulate the quality of vehicles on the road by eliminating aging and defective vehicles when their registration expires. Singapore also pioneered the use of congestion charging, which has since been followed by other cities including London, Milan and Stockholm. Under congestion charging, road users are charged for travelling based on the frequency and time of day that travel takes place, to encourage drivers to consider alternative travel modes or timeframes.

<sup>22</sup> In the case of persons this is usually mass public transport, walking or cycling and in the case of freight to increase the share of rail or water transport

<sup>23</sup> Land Transport Authority, Singapore. No date. Electronic Road Pricing (ERP). http://bit.ly/1MoZ1TS

<sup>24</sup> Xiao, Junji et al. no date. Vehicle Quota System and Its Impact on the Chinese Auto Markets: A Tale of Two Cities. http://bit.ly/1F1K4Fq

#### **Bus Rapid Transit (BRT)**

Strengthening public transport is an important component of sustainable transport policy. In recent years a revolution has started, which is changing the face of bus transport in many cities, especially in the developing world. Over 150 cities have now introduced Bus Rapid Transit (BRT) systems, which include many of the features of rail based mass transit systems, but at a fraction of the cost. The total length of BRT systems over the past 15 years has increased by almost 900%, from approximately 600km in 2000 to more than 5000km today. These systems now transport over 32 million passengers per day<sup>25</sup>.

#### **Green Freight**

Heavy-duty vehicles used for freight transportation have a marked impact on climate and air quality. In particular, the problem of "empty miles" (i.e. vehicle miles traveled without a load) is still prominent and is exacerbated by a fragmented freight sector. To reduce the adverse effects of the freight sector, governments are working to introduce cleaner fuels, fuel economy standards, tax incentives for investments in freight infrastructure, fleet upgrades, and new information technologies. There are also emerging initiatives to increase the involvement of the private sector in technological advancements, efficiency improvements, and certification systems for the freight sector.

#### **Road Safety**

Road safety is another ongoing area of concern in both developed and developing country contexts. A worldwide investment in infrastructure safety to improve the Star Rating of roads could save 40,000,000 deaths and serious injuries for an investment of \$681 billion (or 0.1% of GDP per year for 10 years). More than \$8 of benefits to the economy and health systems can be unlocked for every \$1 invested in road safety, and thus this can be a key focus of sustainable transport policies worldwide.<sup>27</sup>

#### **Expanded Cycling and Public Bike Schemes**

Over 700 cities wordwide now have a public bike scheme, <sup>28</sup> with much of the recent growth taking place in China, which holds many of the world's largest public bike schemes. Public bike schemes have resulted in a modest impact of modal shift towards cycling and increased awareness of decision makers on the need to create cycling infrastructure. This opens up the possibilities for a more sustained growth of cycling not just through the use of public bicycles but also by increasing the use of privately owned bicycles.<sup>29</sup>

#### **Fuel Economy**

In recent years it has become clear that the world is making progress on fuel economy, with more countries acknowledging the need for strong fuel economy policies, and more countries investigating, developing and implementing those policies. Fuel economy trends are showing signs of progress; yet, there a long way to go to reach the Global Fuel Economy Initiative (GFEI)'s 2030 target of a 50% reduction in the fuel consumption of new cars (in L/100km) compared to 2005 levels. As vehicle market growth in non-Organization for Economic Cooperation and Development (OECD) markets is increasing much faster than in OECD markets, additional focus should be placed in helping non-OECD countries to develop and deploy more stringent fuel economy policies.<sup>30</sup>

<sup>25</sup> Global BRT Data. http://brtdata.org/

<sup>26</sup> Clean Air Asia. No date. Green Freight and Logistics website. http://www.greenfreightandlogistics.org/

International Road Assessment Programme. 2014. G20 Infrastructure Investment Can Save 40,000,000 People http://www.irap.net/en/about-irap-3/research-and-technical-papers?download=259:g20-infrastructure-investment-can-save-40-000-000-people
 Russell Meddin, unpublished data, June 2014.

<sup>29</sup> The Bike-sharing Blog. 2015. http://bike-sharing.blogspot.com/

<sup>30</sup> GFEI Annual Report 2014. http://www.fiafoundation.org/connect/publications/gfei-annual-report-2014

#### **Cleaner Fuels**

Stricter fuel and vehicle emission standards can help to realize major health benefits due to reduced air pollution, and can help to reduce black carbon emissions from heavy trucks and buses by 90% or more. Low sulfur fuels are essential to the effective operation of modern emission control systems on motor vehicles. The developed world largely has the required fuel quality to enable strict emission standards, and the developing world is still catching up in the introduction of cleaner fuels. While leaded gasoline has been largely phased out globally, reducing the level of sulphur in diesel is still an critical challenge in many developing countries.<sup>31</sup>

#### **Electric vehicles (EVs)**

EVs are generally quieter, more energy efficient<sup>32</sup>, and less costly to operate and maintain than traditional fossil fuel-driven vehicles (although they are generally more costly to purchase). Importantly, EVs also contribute no direct emissions of air pollutants. While electric vehicles are slowly growing in popularity with recent advancements,<sup>33</sup> more attractive pricing and more widespread supporting infrastructure (i.e. increasing the scale and performance of charging stations) is required to increase EV market share, and in turn, the potential of EVs for positive environmental impacts. For example, in Germany, a commitment to achieve an EV share of 20 percent of new registrations by 2020 has fallen far short of the mark, with an EV share of less than one percent in 2014.

These and other potential strategies are incorporated the voluntary transport commitments described in the following section, with the goal to contribute to sustainable development and climate change goals by increasing the sustainability of transport systems worldwide.

<sup>31</sup> UNEP. Partnership for Clean Fuels and Vehicles. http://www.unep.org/transport/new/pcfv/

<sup>32</sup> US Department of Energy. All-Electric Vehicles. http://www.fueleconomy.gov/feg/evtech.shtml

<sup>33</sup> Energy.gov. 2013. EV Sales Skyrocketing. http://energy.gov/articles/ev-sales-skyrocketing-egallon-holds-steady

## Section II.

### **Review of Existing Commitments and Emerging Initiatives**

"It is time to reshape the world's transport systems for a cleaner, safer and more sustainable future<sup>34</sup>. Be a global citizen. Act with passion and compassion. Help us make this world safer and more sustainable today and for the generations that will follow us.

Find new green solutions, be a champion within your industry and urge others to commit to a new sustainable transport future."

- Ban Ki-moon, International Transport Forum 2015<sup>35</sup>

Voluntary transport commitments provide tangible actions to apply elements of the sustainable transport toolkit described in the previous section to a coherent set of projects and policies at local, national, regional and global levels. This section describes the growing number of voluntary transport commitments and their impacts, spanning a number of commitment types during the 2012-2015 period (as shown in Table 6), which include the following:<sup>36</sup>

- Sustainable Development 2012-2013 commitments: The 16 original transport voluntary commitments made at the Rio+20 Conference in 2012<sup>37</sup>, and the six additional follow-on commitments made in 2013; and
- Climate Change 2014-15 commitments: Five land transport commitments made at the Climate Summit of the Secretary-General in 2014 and seven additional emerging commitments under development as part of the Lima Paris Action Agenda in 2015.

Name of Commitment	Organizations
Original Rio+20 Commitments (2012)	
Building Institutional and Political Capacity for Urban Sustainable Mobility	UN-HABITAT in partnership with City Governments, ICLEI, ITDP, GIZ, UITP, CODATU and Regional Development Banks
CAPSUT-"Capacity Building on Sustainable Urban Transport"	GIZ
Commitment to Sustainable Transport	AfDB, ADB, CAF, EBRD, EIB, IDB, ISDB, WB
Doubling the market share of public transport worldwide by 2025	UITP and participating members
Creating a world free of high-risk roads	iRAP
Pas-Port To Mobility	Velo Mondial
Principles for Bus Rapid Transit Systems	ITDP, GIZ, GSD+, Logit Engineering
Principles for Transport in Urban Life	ITDP, Nelson/ Nygaard, Gehl Architects
Promote and support the reduction of Particulate Matter/Black Carbon emissions from transport through the introduction of cleaner, low sulphur fuels and cleaner vehicles through adoption of vehicle emissions standards	UNEP on behalf of PCFV
Promoting Environmentally Sustainable Transport (EST)	UNCRD and partners
Promoting Green Freight in Europe and Asia	Secretariat for Green Freight Europe: ESC, EVO Dutch Shippers' Council, CAA-Asia, Green Transformation Lab

<sup>34</sup> ITF Leipzig, 27 May 2015 http://www.ppmc-cop21.org

<sup>35</sup> ITF Leipzig, 27 May 2015 http://www.ppmc-cop21.org

To respond to the call for multi-stakeholder action, the SLoCaT Partnership through its members and other organizations facilitated 17 Voluntary Commitments at the Rio+20 conference to promote more sustainable transport. A number of additional commitments were added in 2013 to make it possible for the transport community and other developmental partners to better observe and track the impact of policies and measures on the sustainability of transport at global, national and local levels. SLoCaT also played a role in the coordination of the commitments made at the 2014 SG Climate Summit, and is actively involved in promoting the emerging 2015 commitments through PPMC's partnership with the LPAA.

<sup>37</sup> A 17th Rio+20 commitment by the Dutch Cycling Embassy on promoting cycling is not included in this report, as its implementation has been discontinued due to a change in strategic focus of the Dutch Cycling Embassy.

Name of Commitment	Organizations
Original Rio+20 Commitments (2012)	
Results-Based National Urban Transport Policy and Finance	ITDP, Carnegie Endowment for International Peace
Scaling Up Sustainable Transport Solutions Worldwide	EMBARQ
Promote the development and implementation of fuel economy standards and policies across the globe	UNEP, FIA Foundation, IEA, ITF, ICCT
UIC Declaration on Sustainable Mobility	UIC and participating members
Post-Rio+20 Commitments (2013)	
Climate Change Adaptation for International Transport Networks (CCAITN)	UNECE that services the Inland Transport Committee
Evaluating Impacts of Sustainable Transport Voluntary Commitments	ITDP, ITS-Davis, IDB, IEA, ICCT and other partners
For Future Inland Transport Systems (ForFITS)	UNECE
Tracking Environmentally Sustainable Transport (TEST)	IEA
UNECE Road Safety Activities	UNECE
Urban Mobility Observatory (UMO)	CAF
Climate Summit Commitments (2014)	
Low-Carbon Sustainable Rail Transport Challenge	UIC and participating members
Declaration on Climate - UITP	UITP and participating members
Urban Electric Mobility Vehicles Initiative (UEMI)	UN-Habitat and partners
Vehicle Fuel Efficiency Accelerator	Global Fuel Economy Initiative and FIA Foundation (hosts secretariat)
Global Green Freight Action Plan	Smart Freight Centre and partners
Emerging Climate Initiatives (2015)	
MobiliseYourCity	CODATU, CEREMA, AFD, GIZ
C40 Cities Clean Bus Declaration of Intent	Cities of the Low Emission Vehicles Network
Cycling delivers!	WCA and ECF
Airport Carbon Accreditation	ACI Europe, ACI Asia-Pacific, ACI North America, ACI Africa, and ACI - LAC
International Zero-Emission Vehicle Alliance	CEPA, ICCT
Navigating a changing climate	PIANC-IAPH-IMPA-IHMA-EuDA
ITS for the Climate	ATEC-ITS France and TOPOS Aquitaine

#### Table 6. List of transport commitments (2012-2015)

(\*Abbreviation of organizations: AfDB - African Development Bank, ADB - Asian Development Bank, ATEC - Association pour le développement des Transports, de l'Environnement, et de la Circulation, CAA - Clean Air Asia, CAF - Development Bank of Latin America, CEPA - California Environmental Protection Agency, CODATU - Cooperation for urban mobility in the developing world, EBRD - European Bank for Reconstruction and Development, ECF - European Cyclists' Foundation.

EIB - European Investment Bank, EMBARQ - "Sustainable Urban Mobility" by World Resource Institute, ESC - European Shippers' Council, EuDA - European Dredging Association, GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit, IAPH - International Association of Ports and Harbors, ICCT - International Council on Clean Transportation, ICLEI - Local Governments for Sustainability, IDB - Inter-American Development Bank, IEA - International Energy Agency, IHMA - International Harbour Masters' Association, IMPA - International Maritime Pilots' Association, IRAP - International Road Assessment Programme, IsDB - Islamic Development Bank, ITDP - Institute for Transportation and Development Policy, ITF - International Transport Forum, ITS - Intelligent Transportation System, PCFV - Partnership for Clean Fuels and Vehicles, PIANC - World Association for Waterborne Transport Infrastructure, Rio+20 - United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil in June 2012, 20 years after 1992 Earth Summit in Rio, ITS-Davis - Institute of Transportation Studies - UC Davis, UIC - International Union of Railways, UITP - International Association of Public Transport, UNCRD - United Nations Centre for Regional Development, UNECE - United Nations Economic Commission for Europe, UNEP - United Nations Environment Programme, UN-HABITAT - United Nations Human Settlements Programme, WB - World Bank, WCA - World Cycling Alliance)

These 34 commitments cover a wide range of subsectors and transport modes, most predominantly sustainable transport development in the context of urban development, public transport and non-motorized transport, with slightly fewer commitments focusing on fuel and vehicle efficiency. The number of commitments with a focus on road safety and sustainability and freight and logistics is notably smaller.

Area of focus	Total (out of 34 commitments)
Public and Non-motorized transport	22
(Bus, metro/railway/bikes/walking)	22
Urban Planning and Infrastructure	10
(Smart cities)	18
Fuel and Vehicle Efficiency	45
(Efficiency, clean fuel, fuel economy, energy)	15
Road SafetyandRoad Sustainability	0
(Improving road safety and the sustainability of roads)	8
Freight and Logistics	0
(Green freight, efficiency)	8

#### **Table 7. Areas of focus of transport commitments**

Global transport commitments in the context of sustainable development and climate change have made solid progress since 2012. Between 2012 and 2015, the number of global transport commitments has increased from the original set of 17 commitments at Rio+20 to a current total of more than 34 commitments, which covers a wider range of topics including electric mobility, maritime transport, airports and ITS, among others. The number of partnering organizations involved in voluntary transport commitments has increased from about 30 to more than 100, which include multi-lateral development banks (MDBs), non-governmental organizations (NGOs), city governments, and national policy makers, among others. An important observation is that with the exception of one of the original Rio+20 commitments, each of the remaining voluntary commitments are still active.

In addition to the 'supply-side' commitments (i.e. those defining and implementing strategies to achieve sustainable development and climate change objectives taken by the transport sector) described above, this report also considers 'demand-side' commitments from cities (through a number of cooperative initiatives) and countries (through the emergence INDCs):

- **City-level commitments** include a broad range of commitments by locally-focused actors such as Civitas, the Compact of Mayors, and European Mobility Week; and
- National-level commitments on transport sector mitigation efforts are made through the INDCs submitted by Parties to the UNFCCC.

These city and country commitments, though different in nature from the Rio+20 and Climate Summit commitments, offer opportunities through the commitments initiated by the transport sector for successful project implementation and policy incorporation at municipal and national levels.

In addition, the number of commitments made by city initiatives has grown rapidly with hundreds of local and national governments signing on to more than eight different initiatives and partnerships. Furthermore, to date, more than 30 INDCs have been submitted by Parties to the UNFCCC, with the anticipation that more than 100 additional submissions will be made in the coming months in preparation for COP21. A large number of the INDCs submitted to date includes specific transport components.

Together, the width and coverage of these commitments address all transport sub-sectors and are relevant in both developed and developing countries. Potential impacts from full implementation of the various commitments are significant. It is estimated that at least one out of two transport trips to be made in 2025 will be affected by these collective commitments if they are implemented successfully. Furthermore, the shift to low-carbon mobility, embodied in part by these commitments, could save up to \$70 trillion in fuel costs, as estimated by the International Energy Agency.<sup>38</sup>

Expected benefits of these commitments will extend well beyond economic benefits to encompass improved air quality, reduced climate change impacts, increased road safety, and enhanced public health. To illustrate, the voluntary transport commitment from the International Association of Public Transport (UITP)<sup>39</sup> to double public transport mode share worldwide promises the following projected benefits:<sup>40</sup>

<sup>38</sup> Joint Action Statement for the Transport Action Area. 2014. http://bit.ly/1KRpObV

<sup>39</sup> UITP Declaration on Climate Leadership. http://bit.ly/1KeClLr

<sup>40</sup> Doubling the market share of public transport worldwide by 2025. http://bit.ly/10WtpTy

- Saving around 170 million tons of oil equivalent, and avoiding the emission of around 550 million tons CO<sub>2</sub> equivalent in 2025 compared to a business as usual (BAU) scenario;
- Reducing urban traffic fatalities by 15% as opposed to an increase of 30% under a BAU scenario;
- Increasing daily mobility would provide the 30 minutes of physical exercise recommended by the World Health Organization (WHO) and reduce the risk of obesity and coronary heart disease by 50%; and
- Doubling the number of green jobs with public transport operators to 14 million by 2025 (provided that labor productivity increases by 1% per year).

#### **Implementing the Commitments**

The organizations implementing the voluntary transport commitments have taken initial steps toward full implementation of their commitments, which have been pursued in a number of different implementation approaches, as shown in Table 8:<sup>41</sup>

Name of Commitment	Strengthening Partnerships	Policy Implementation and Standards	Capacity Building	Development of Tool Kits	Data Collection and Monitoring	Financial Support	Pilot or Full-Scale Project Implementation
Original Rio+20 Commitments (2012)	9	12	7	5	4	2	5
Post-Rio+20 Commitments (2013)	3	4	2	0	4	0	0
Climate Summit Commitments (2014)	4	4	5	3	3	0	5
Emerging Initiative (2015)	5	6	5	2	1	0	4
Total Number of Commitments	21	26	19	10	12	2	14

**Table 8. Implementation approaches of transport commitments** 

Among the 34 commitments, the largest number focuses on developing policy recommendations and standards to governments and institutions at local, national, and regional levels. These commitments also promote stronger cooperation between the public and private sectors by convening conferences and other events around the world to strengthen partnerships within and beyond the sustainable transport community.

Capacity building through outreach efforts to and training for government officials is another key element for the implementation of many of the transport commitments. A smaller subset of these commitments focuses on increasing knowledge and data collection to track, monitor, and measure the impacts of sustainable transport, and on developing new tools and methodologies to advance sustainable transport solutions.

Fewer commitments have a direct focus on broad project implementation and financing, though those that do have such a focus are large in scale (e.g. the US\$ 175 billion financing commitment of the MDBs, the rail-focused commitment of UIC, the public transport-focused commitment of UITP, and the fuel economy commitment of GFEI).

# Progress on Voluntary Commitments at Rio+20 (2012) and follow-on commitments (2013)

#### **Overview**

The High Level Panel of Eminent Persons on the Post-2015 Development Agenda included "Forging a New Global Partnership" as one of five transformative shifts needed to implement the post-2015 agenda. 42 Each priority area identified in the post-2015 agenda should be supported by dynamic partnerships. To respond to this call for multi-stakeholder action, the SLoCaT Partnership through its members and other organizations working on sustainable transport facilitated the delivery of 17 voluntary commitments at the Rio+20 conference to promote more sustainable transport.

<sup>41</sup> This analysis is based on Annex 1.

<sup>42</sup> UN. 2013. A New Global Partnership. http://www.un.org/sg/management/pdf/HLP\_P2015\_Report.pdf

The 16 active voluntary commitments from 2012 have galvanized a wide range of thematic and sectorial actors within the sustainable transport community into action on sustainable development. These commitments include the unprecedented ten-year voluntary commitment of US\$ 175 billion for more sustainable transport, made by eight of the world's largest multilateral development banks. Other commitments made by the sustainable transport community focus on knowledge development, capacity building, and policy facilitation, among other areas.

#### **Impact**

The initial Rio+20 commitments have marked substantive progress in the course of three years, as demonstrated in the following summary updates:

#### **Building Institutional and Political Capacity for Urban Sustainable Mobility**

UN-Habitat and commitment partners are supporting policy makers in adopting strategies for sustainable mobility in the Africa, Asia, and Latin America and the Caribbean (LAC) regions through collaborative commitments by vehicle and energy related industries and cities in the context of more compact urban planning and balanced Avoid-Shift-Improve approaches.

- Completed in 2013 a Rapid Assessment Tool for Sustainable Urban Mobility for Application in the Africa, Asia and LAC Regions.
- Disseminating experiences from UN-HABITAT's Global Environment Facility (GEF)-Sustainable Transport Project East Africa and the GENUS project.
- To complement the original commitment, UN Habitat launched the "Urban Electric Mobility Initiative" commitment
  during the UN Climate Summit in September 2014, which aims to have electric vehicles make up 30% of urban vehicle
  travel by 2030.

#### **Capacity Building on Sustainable Urban Transport (CAPSUT)**

GIZ and commitment partners are developing an international platform for training activities in the field of urban mobility to allow the community of mobility practitioners and decision-makers to incorporate knowledge, trends and developments more comprehensively.

- Implemented 17 training courses with more than 350 participants on transport and climate change, sustainable urban transport, TDM and parking management.
- Completed in 2015 the CAPSUT website and database, which provides information about training and capacity development approaches<sup>43</sup>.
- Developed in 2015 resource material on transit alliances and parking management;
- Planned in 2015 training courses in Asia jointly with the Islamic Development Bank; and at the Ecomobility Festival in Johannesburg.
- Planning in 2016 the development of a global database to provide a comprehensive overview on transport related academic offers (i.e. Bachelor, Master, PhD).

#### **Commitment to Sustainable Transport**

The world's eight largest MDBs have developed an action plan to measure collective progress toward their \$175 commitment to sustainable transport. These actions are categorized into four areas: Assessment Framework, Portfolio Assessments, Project-level Assessments, and Sustainable Transport Indicators. Actions are planned to be delivered under three phases: 2013-2014; 2015-2016; and 2017-2021.

- Approved approximately \$25 billion in transport projects in 2013. Combined with the \$20 billion of transport projects approved in 2012, the MDBs are generally on target to meet the \$175 billion goal over the 10-year commitment period.
- Approved more than 90 technical assistance projects in 2013 to support policy development, research, and capacity building
  efforts. In 2013, four of the eight MDBs completed an assessment of the sustainability of their entire transport lending
  (up from two in the year before). Other MDBs have conducted sustainability assessments for a number of projects, in
  preparation for wider application in subsequent years.
- Continuing development of the Sustainable Transport Appraisal Rating (STAR) tool to help all MDBs better assess the overall impacts of transport projects.

#### Doubling the market share of public transport worldwide by 2025

UITP has been advancing to this commitment by bringing together government officials, investors and transport actors to reduce oil consumption, and GHG emissions, while creating green jobs.

<sup>43</sup> GIZ. Capacity Building in Sustainable Urban Transport. http://capsut.org/

- Many cities have taken up the challenge and are working towards this goal, in line with their specific political, geographical and historical contexts. Successful examples include the Paris region, Greater London, Dubai and Beijing, which all have seen substantive increases in the use of public transport trips.
- Set up a declaration on Climate Leadership in 2014, bringing around 350 commitments and actions from 110 public transport undertakings. Actions give a greater role to public transport in mobility, as well as helping organizations meet their emissions reduction targets, such as London's public transport stretch target.
- In December 2015, in the context of COP21, UITP will present its mid-term review, 'the policies that work' that will enable its delivery and how UNFCCC processes can help scale up ambition and action with public transport.

#### Creating a world free of high-risk roads

iRAP is working with commitment partners to eliminate one and two star roads, to assess the infrastructure-related risk for all road users, and to build the capacity of government and communities on how to build, design and maintain safe and sustainable road networks globally.

- 200,000km+ of roads have been star rated in the last 12 months, including China (100,000km+), Mexico (40,000km+), Australia (40,000km+), the Netherlands (10,000km), USA, South East Europe, India, Brazil, Egypt, Papua New Guinea, Brunei, Cayman Islands, Chile and Qatar.
- Hosted the first global Road Assessment Conference in September 2015 with representatives from over 70 countries, to allow national transport and development leaders to share their star rating targets to maximize travel on 3-star or better roads.
- Providing ongoing technical support to the 3-star coalition, a partnership of organizations calling for minimum 3-star standards for all road users in new road construction.
- Actively supporting government and civil society partners in the more than 70 countries where iRAP activities have been undertaken.
- Investing in the software, specifications and support tools that allow the star rating of roads to be undertaken freely across the world.

#### **Pas-Port To Mobility**

Velo Mondial and other commitment partners have been developing a freely accessible portal<sup>44</sup> for cities to focus on sustainable urban mobility planning, with initial application to cities in Netherlands and subsequent plans to expand globally, if possible.

- Deployed search engine, which is now integrated in Pas-Port to Mobility, as well as seven website portals for cities to focus on sustainable urban mobility planning.
- Implemented first step of the program "Ams=cycling" in Amsterdam in November 2015, to followed by seven other Dutch cities.
- The program is expected to be brought to the Velo City conference in Arnhem-Nijmegen in 2017, and then possibly to spread to cities in other countries.

#### **Principles for Bus Rapid Transit Systems**

ITDP and other commitment partners are working one-on-one with more than 10 key cities worldwide to help evaluate their plans for BRT implementation, recognizing leading BRT systems as well as annual rankings and certification of effective BRT corridors.

- In 2015, representatives from the BRT Centre of Excellence and EMBARQ have joined the Technical Committee, providing guidance for the ITDP BRT Standard.
- The Climate Bonds Initiative has agreed to use the BRT Standard<sup>45</sup> as an evaluating tool for project selection, while the Barr Foundation, UNEP, and UN-Habitat have endorsed the BRT Standard.
- Worked with Brazil in 2014 to open silver or gold corridors in four Brazilian cities.
- Working in 2015 with Yichang (China), and Cebu and Manila (Philippines) to implement gold standard BRT, and with Nairobi, Kampala, and Dar es Salaam on BRT planning.
- Received requests in 2015 from Haifa, Israel and Istanbul, Turkey for their systems to receive BRT Standard scores.
- Planning to release the new edition of the BRT Standard in early 2016.

#### **Principles for Transport in Urban Life**

ITDP and the other commitment partners are developing a set of principles to drive sustainable transportation and livable urban development, promoting land use regulatory reform in five international cities, and finalizing a Transit Oriented Development (TOD) Standard to evaluate how particular principles are represented in TODs.

<sup>44</sup> Pas-Port to Mobility: the Embassy. http://www.pas-port.info/#embassy\_02

<sup>45</sup> ITDP. The Bus Rapid Transit Standard. http://bit.ly/1uCDX1a

- Launched TOD Standard in 2014.<sup>46</sup>
- Released the second of a series of videos<sup>47</sup> on the principles regarding parking / shift and density in 2015.
- Conducting an update to the TOD Standard that will also include a social equity component, for planned release during Habitat III in October 2016.

Promote and support the reduction of particulate matter/black carbon emissions from transport through the introduction of cleaner, low sulphur fuels and cleaner vehicles through adoption of vehicle emissions standards

The Partnership for Clean Fuels and Vehicles (PCFV) is working with governments to introduce low-sulphur fuels and cleaner vehicle technologies and emission standards. This is to be accomplished by networking to share best practices and provide technical and financial support to improved urban air quality through reduction of small particulate matter.

- Assisted countries in moving to low sulphur fuels, particularly in Africa, Asia, Latin America and Eastern Europe, with many setting targets of 50 ppm and below.
- Supported the use of economic and planning tools for clean fuel and vehicle analyses, in conjunction with local enforcement and compliance programs.

#### **Promoting Environmentally Sustainable Transport (EST)**

UNCRD and other commitment partners are bringing together policy makers to facilitate information exchange on sustainable low-carbon transport to international discussions, by providing a knowledge platform for interagency coordination and sharing of experiences across the Asia-Pacific, Africa, and Latin America and Caribbean regions.

- Successfully implemented Regional EST Forums in Bali, Indonesia in 2013, resulting in the Bali Declaration<sup>48</sup> and in Colombo,
   Sri Lanka in 2014, resulting in the Colombo Declaration<sup>49</sup>.
- Co-organized a training session in 2013, attended by 15 participants from 10 different countries from Asia, Africa and Latin America for developing actions plans to propose to their home organizations.
- Established a reporting mechanism for EST member countries to report on their progress in sustainable transport through 2020.
- Providing ongoing technical and financial support for the formulation of a National EST Strategy to selected Asian developing countries (completed in Vietnam, the Philippines, Lao People's Democratic Republic, Indonesia, Cambodia and Nepal).
- Pursuing activities in support of the development of a Regional Agreement on Green Freight in Asia with other partners.

#### **Promoting Green Freight in Europe and Asia**

Clean Air Asia and other commitment partners are developing green freight programs in Europe and Asia to reduce dependency on fossil fuels and improve air quality, by providing input into government freight policies and programs.

- Advancing country level strategies and activities on green freight in Nepal, Bangladesh, and Vietnam.
- Cooperating with Green Freight India in forming a green freight working group to raise policy issues related to freight efficiency at the national level.
- Promoting activities and capacity building on online freight exchange systems in Vietnam and India.
- Collaborating with the China Green Freight Initiative and Sub-regional project on promoting green freight within the Greater Mekong Sub-region (GMS).
- Contributing towards preparation of a Regional Cooperation Agreement on Green Freight in Asia.
- Developing tools and methodologies for emissions monitoring and accounting in the freight sector.
- Updating and localizing in India the Green Trucks Toolkit.

#### Protecting children from traffic injuries and improving their urban environment

FIA Foundation in cooperation with other commitment partners are launching the Zenani Mandela Campaign to encourage policies on protecting children and young people from traffic injury by showcasing sustainable road design, improving cycling and pedestrian provision, together with developing safe routes for children to school.

- Implemented model school zone road safety pilot schemes in nine countries through Safe Kids Worldwide.
- Implemented 'Helmets for Kids' programme delivery in Vietnam and Cambodia at 39 schools, with 26,000 children receiving helmets, implemented by AIP Foundation with funding from the Road Safety Fund.
- Launched 'Long Short Walk' campaign in more than 60 countries urging inclusion of safe and sustainable transport in the post-2015 agenda, and promoting safe walking and cycling as a right for children.

<sup>46</sup> ITDP. 2014. TOD Standard. https://www.itdp.org/tod-standard/

<sup>47</sup> ITDP. 2015. Parking: Searching for the Good Life in the City. http://bit.ly/1JjWYtj

<sup>48</sup> Bali Declaration on Vision Three Zeros: Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia. 2013. http://bit.ly/1Pi50YT

<sup>49</sup> United Nations Centre for Regional Development. Eighth Regional EST Forum in Asia. 19 Nov 2014 – 21 Nov 2014. http://bit.ly/1FoHZDa

- Launched a global partnership with United Nations Children's Fund (UNICEF) for advocating child road safety, and supporting programs of Save the Children.
- Organizing a roundtable on Child Health and Urban Mobility at the 2nd Global High Level Conference on Road Safety in Brasilia.

#### **Results-Based National Urban Transport Policy and Finance**

ITDP is working with other commitment partners to enable more effective implementation of results-based infrastructure investment and system management, with the ultimate goal of at least four governments to adopt, update or revise national policies to support sustainable transportation.

- Released the first section of the National Policy Paper in 2014<sup>50</sup>, which evaluates how well countries are doing to respond to the transit needs of their citizens, and presented at International Transport Forum.
- Conducting further research for the second section of the National Policy Paper on 130 projects in 9 countries, to explore how sustainable transport projects are funded and financed, for planned release by the end of 2015.
- Developing a third section of the National Policy Paper, regarding national implementation of urban transport policies, for planned release in 2016.
- Developing a country specific paper on Brazil with initial research presented at the Global Infrastructure conference in Basel.

# Scaling Up Sustainable Transport Solutions Worldwide with an aim to urge cities in emerging economies to adopt high-quality sustainable mobility and urban development

WRI Ross Center for Sustainable Cities (EMBARQ) is cooperating with other commitment partners to encourage cities in mostly emerging economies to adopt high-quality sustainable mobility and urban development strategeies, by delivering game-changing solutions, replicating best practices, and shifting international policy towards sustainable transport.

- Launched seven "game-changer" policy or projects, with 75 cities directly impacted, 124 cities influenced, 1.47 million hours of travel time saved, 7.1 billion person-trips served, 3.82 million tons of CO<sub>2</sub> emissions avoided and 1,922 lives saved.
- Launched Big Bus system in Bangalore, a reform of a city bus service in India, and introduced Car-Free Sundays in six Indian cities.
- Started road safety work in 10 major global cities.
- Developing a go-to site for information on high-performance bus systems.

#### Promote the development and implementation of fuel economy standards and policies across the globe

FIA Foundation is promoting fuel economy standards around the world with other commitment partners, aiming to secure a 50% improvement in the fuel economy of new cars by 2030, by engaging countries in fuel economy toolkit work, and focusing on policy support, outreach, and research and analysis.

- Supported regional conferences on fuel economy in the Middle East, Central America, South Asia, South-East Asia, Asia-Pacific, as well as national level initiatives.
- Launched a commitment to get as many countries as possible towards a doubling of average passenger vehicle fuel economy in the global fleet by 2050.
- As of August 2015, over 27 countries had signed projects and were working with GFEI, among which 18 had completed vehicle fuel economy baseline studies to prepare for the establishment of new policies or standards.

#### **UIC Declaration on Sustainable Mobility**

The International Union of Railways (UIC) Declaration on Sustainable Mobility envisions that all relevant UIC members (i.e. all mobility providers) will have signed the Declaration on Sustainable Mobility, which is a collection of 18 commitments on sustainable development, including environmental, social and ethical business topics.

- Signatories to the Declaration include all major regional rail networks (i.e. India, China, Russia, North America, Europe, Japan).
- Developed and published a comprehensive set of reporting guidelines to support the Declaration.
- Currently aligning with Global Reporting Initiative (GRI) to assess accountability, transparency, ethical behavior, economic and social impacts through G4<sup>51</sup> protocol.
- Held workshop in May 2015 between G4 advisors and UIC members on how to apply in railway context, with a second workshop planned in October 2015.
- Planning to adopt new guidelines in 2016, and to issue a summary report in 2017.

In 2013, following on the initial commitments made at the Rio+20 Summit six additional commitments were made to complement the original commitments from 2012. These subsequent commitments will make it possible for the transport

<sup>50</sup> ITDP. 2014. Best Practice in National Support for Urban Transportation. http://bit.ly/1LHmmLh

<sup>51</sup> https://www.globalreporting.org/standards/Pages/default.aspx

community and other partners to better observe and monitor how the sector develops and what the impact of policies and measures will be on the sustainability of the transport sector at global, national and local levels.

The Rio+20 follow-on commitments have been able to report on substantive outcomes and, after a period of two years, are making plans for developing further activities:

#### **Climate Change Adaptation for International Transport Networks (CCAITN)**

This commitment is led by UNECE to identify potential climatic impacts on transport infrastructure, to present best practices in national policies and risk management, and to formulate relevant strategies to enhance the resilience of international transport networks.<sup>52</sup>

- Released the expert group report, Climate Change Impacts and Adaptation for International Transport Networks in 2013<sup>53</sup>.
- In February 2015, the Inland Transport Committee of UNECE decided to extend the commitment until 2017, with the second phase to focus on the following issues:
  - Establish inventories of transport networks in the UNECE region that are vulnerable to climate impacts, where possible using geographic information systems (GIS).
  - Use and develop methodologies, tools and good practices to address potential extreme hazards (e.g. high temperatures and floods) to selected inland transport infrastructure in the UNECE region under different scenarios.
  - Identify and analyze case studies on potential economic, social, and environmental consequences of climate change, providing cost/benefit analyses of adaptation options.

#### **Evaluating Impacts of Sustainable Transport Voluntary Commitments**

This ITDP led voluntary commitment develops and analyzes scenarios that consider the potential impacts on sustainable development indicators of voluntary transport commitments.

- Completed a presentation of initial findings related to potential impact of sustainable transport voluntary commitments on sustainable development in December 2013.
- Released "A Global High Shift Scenario: Impacts and Potential for More Public Transport, Walking, and Cycling with Less Car Use" in September 2014.
- Completed report on potential impact of sustainable transport voluntary commitments on sustainable development in December 2014.
- Collaborating with ITS-Davis to create a global roadmap of available data on active transport to promote global financing of cycling infrastructure, promotion, and safety.

#### For Future Inland Transport Systems (ForFITS)

This UNECE led commitment focuses on the analysis of the evolution of transport activity, energy use and CO<sub>2</sub> emissions in a range of policy contexts.

- Developed the ForFITS modeling tool in 2013<sup>55</sup>.
- Conducted capacity-building workshops in each UN region in 2013 (e.g. Addis Ababa, Bangkok, Geneva, Santiago, Hammamet)<sup>56</sup>.
- Held training sessions for administrative entities in each UN region during 2013<sup>57</sup>.
- Released pilot report on seven countries in 2013 (i.e. Chile, Ethiopia, France, Hungary, Montenegro, Thailand, and Tunisia)<sup>58</sup>.
- Released in 2015 "Report on progress made following the Kaunas Workshop Results of the ForFITS report for Lithuania and Kaunas" 59.
- Released overall evaluation report in 2014.<sup>60</sup>

#### **Tracking Environmentally Sustainable Transport**

This IEA commitment tracks, monitors and makes projections on emissions of GHGs and local pollutants, energy use, and cost of the transport sector globally to assess the progress of sustainable transport worldwide.

- Continuing to update modeling capabilities for mass transport modes, rail and buses.
- 52 Climate Change Adaptation for International Transport Networks (CCAITN). http://bit.ly/1YtSTOU
- 53 UNECE. 2013. Climate Change Impacts and Adaptation for International Transport Networks. http://bit.ly/1KFlaKM
- 54 Replogle, M., and L. Fulton. 2014. A Global High Shift Scenario: Impacts and Potential for More Public Transport, Walking and Cycling with Lower Car Use. http://bit.ly/1qKZpSu
- 55 UNECE. ForFITS Model: Assessing Future CO<sub>2</sub> Emission. http://www.unece.org/?id=19273
- 56 UNECE. For FITS Model: Assessing Future CO Emission Capacity building workshops. http://www.unece.org/?id=19273
- 57 UNECE. ForFITS Model: Assessing Future CO, Emission Capacity building workshops. http://www.unece.org/?id=19273
- 58 UNECE. Pilot report. http://www.unece.org/fileadmin/DAM/trans/doc/themes/ForFITS/Pilot%20report.pdf
- 59 UNECE. Report on progress made following the Kaunas Workshop Results of the ForFITS report for Lithuania and Kaunas. http://bit.ly/1LHNObM
- 60 UNECE Evaluation Report (March 2014). http://bit.ly/1L0mTOd

- Preparing for an IEA publication on Energy Technology Perspectives primarily focused on urban transport activity, energy use and GHG emissions.
- Developing a new modeling platform to assess progress of sustainable transport activities on a global level planned by 2017.

#### **UNECE Road Safety Activities**

This UNECE-led commitment aims to stabilize and reduce in the forecast level of road traffic fatalities around the world by 2020. UNECE will assist countries in the ECE region and beyond in implementing the United Nations Decade of Action for Road Safety and conducting analytical work which supports the development of legal instruments and explores emerging challenges that require governments to take common action.<sup>61</sup>

- The United Nations Secretary General appointed Mr. Jean Todt as the Special Envoy for Road Safety in April 2015. UNECE acts as the secretariat for the Special Envoy to support the commitment on road safety<sup>62</sup>.
- Planning participation in the 2nd Global High Level Conference on Road Safety, to be held in in Brazil in November 2015 in Brasilia.

#### **Urban Mobility Observatory**

This CAF-implemented commitment undertakes data compilation and analysis on urban and sustainable transport in cities of the Latin American region.

- 25 cities in 11 Latin American countries are now participating, including the ten largest urban areas of Latin America.
- Planned inclusion of all major cities with more than 2 million inhabitants by 2020, to address data gaps and improve data quality on urban mobility in Latin America.
- Created online resource for urban transport data<sup>63</sup>.
- Created 25 studies based on data collected.
- Conducting ongoing policy dialogue with 25 cities based on data and research.

#### **Summary of Rio+20 Transport Related Voluntary Commitments**

The majority of the 2012 voluntary commitments have shown steady progress toward the achievement their goals through a wide variety of implementation strategies, including scaling up financial contributions for sustainable transport (e.g. MDB commitment), developing knowledge products on transport subsectors (e.g. CAPSUT), convening relevant policymakers and strengthening networks (e.g. EST), expanding key policies on sustainable transport (e.g. GFEI), and supporting implementation of pilot studies and projects (e.g. Principles for BRT Systems).<sup>64</sup>

The 2013 commitments have not all seen the same level of progress due in part to a shorter implementation period, though some of these additional commitments have demonstrated tangible results in the second year of their implementation. The results include specific knowledge products that have been released (e.g. as a result of ITDP's commitment to evaluate impacts of national urban transport policies), and through advancing methodologies and data collection efforts (e.g. the knowledge base urban transport in LAC cities that has been developed through the CAF commitment).

# Progress on Climate Commitments made at UN Secretary General's Climate Summit (2014) and Emerging Climate Commitments (2015)

#### **Overview**

In September 2014, UN Secretary-General Ban Ki-moon hosted a Climate Summit in New York to mobilize action and ambition on climate change. The two main objectives of the Climate Summit were to catalyze ambitious action on the ground and to mobilize political will for an ambitious global legal climate agreement at COP21 in Paris in December 2015.

The UN Secretary-General asked governments and leaders of business, finance, industry, and civil society to define new commitments to launch substantial, scalable and replicable initiatives to help the world shift toward a low-carbon economy. The initiatives are clustered among eight action areas, and transport-related commitments are included among three of these action areas: transportation, energy and industry.

<sup>61</sup> UNECE Road Safety Activities. https://sustainabledevelopment.un.org/partnership/?p=2344

<sup>62</sup> UNECE. UN SG's Special Envoy for Road Safety Home. http://bit.ly/1KtRs9e

<sup>63</sup> CAF. Urban Electric Mobility Vehicles Initiative. http://bit.ly/1KtJxZK

<sup>64</sup> Note that the Dutch Cycling Embassy commitment made at Rio+20 has been discontinued due to a shift in organizational focus.

The land transport-related commitments made at the SG climate summit (2014) and emerging climate commitments (2015) include the following:

Name of Commitment	Organizations
Secretary General Climate Summit Commitments (2014)	
Low-Carbon and Sustainable Rail Transport Challenge	UIC and participating members
Declaration on Climate Leadership	UITP and participating members
Urban Electric Mobility Vehicles Initiative (UEMI)	UN-Habitat and partners
Vehicle Fuel Efficiency Accelerator	GFEI and FIA Foundation and partners
Global Green Freight Action Plan	Climate and Clean Air Coalition and partners
Emerging Climate Commitments (2015)	
MobiliseYourCity	Climate and Clean Air Coalition and partners
	CODATU, CEREMA, AFD, GIZ
C40 Cities Clean Bus Declaration	Cities of the Low Emission Vehicles Network
Cycling Delivers!	WCA, ECF
Airport Carbon Accreditation	ACI Europe, ACI Asia-Pacific, ACI North America, ACI Africa
	and ACI Latin America and the Caribbean
International Zero-Emission Vehicle Alliance (ZEV Alliance)	CalEPA, ICCT
Navigating a Changing Climate	PIANC-IAPH-IMPA-IHMA-EuDA
ITS for the Climate	ATEC-IST France and TOPOS Aquitaine

#### Table 9. Land-transport related commitments at the SG Climate Summit (2014) and emerging climate commitments

(\* Abbreviations: ACI - Airports Council International, AFD - Agence Française de Développement, ATEC - Association pour le développement des Transports, de l'Environnement, et de la Circulation, Cal-EPA - California Environmental Protection Agency, CODATU - Cooperation for urban mobility in the developing world, ECF - European Cyclists' Foundation, EuDA - European Dredging Association, GFEI - Global Fuel Economy Initiative, GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit, IAPH - International Association of Ports and Harbors, ICCT - International Council on Clean Transportation, IHMA - International Harbour Masters' Association, IMPA - International Maritime Pilots' Association, UIC - International Union of Railways, UITP - International Association of Public Transport, UN-Habitat - United Nations Human Settlements Programme, WCA - World Cycling Alliance)

#### **Scope and Impact**

#### Low Carbon Rail Transport Challenge & Railway Climate Responsibility Pledge

This UIC led initiative sets out ambitious targets for improvement of rail sector energy efficiency, reductions in GHG emissions and a more sustainable balance between transport modes.

- 50% reduction in CO<sub>2</sub> emissions from train operations by 2030, and 75% reduction by 2050 (e.g. reduction of specific average CO<sub>2</sub> emissions per passenger-km and tonne-km, relative to 1990 base line)
- 50% reduction in energy consumption from train operations by 2030, and 60% reduction by 2050 (specific final energy, relative to 1990 baseline)
- 50% increase in rail's share of passenger transportation by 2030 and doubling by 2050 (relative to 2010 baseline)
- Rail freight activity equal to that of road freight by 2030, and exceeding road freight volumes 50% by 2050

To date, the following steps are in process:

- Building capacity for rail sector energy efficiency through thrice-yearly meetings of the worldwide Energy & CO<sub>2</sub> expert network and global conferences.
- Building support for transparent procurement and reporting of renewable energy through the UIC Zero Carbon Project<sup>65</sup>.
- Harmonization for the calculation of embodied CO, in rail infrastructure is in progress.
- Annual reporting of rail energy consumption and CO<sub>2</sub> emissions in partnership with IEA is in progress, with planned report in November 2015.
- Development of the climate responsibility pledge, designed to support delivery of the global targets through company level actions, is in progress.

<sup>65</sup> http://www.traintoparis.org/Presentation-of-the-UIC-Zero

#### The Declaration on Climate Leadership

This UITP led initiative builds on UITP's goal to double the market share of public by 2025, which would prevent half a billion tons CO<sub>2</sub> equivalent in 2025.

- UITP has confirmed public transport's leadership in climate action and brings around 350 commitments and actions from 110 public transport undertakings.
- UITP actions aimed at giving a greater role to public transport will help decrease the regional carbon footprints (e.g. every additional tonne of CO<sub>2</sub> produced due to more public transport in New York and Rio, delivers a wider reduction of up to 7 tonnes).
- UITP support will help agencies meet their emissions reduction targets (e.g. London's public transport stretch target to cut CO<sub>2</sub> emissions per passenger-km by 40% by 2025 and Montreal's GHG emissions intensity reduction targets of 20% by 2020).

UITP is developing a mid-term review of the doubling public transport goal for the sector,<sup>66</sup> by analyzing the public transport sector's capacity to contribute to the UITP commitment and preparing policy recommendations for the international community and national governments to enable local level action to help put transport on a 2DS pathway.

UITP is also actively promoting member commitment to sustainability reporting and building capacity in the transport sector in support of the post-2015 Sustainable Development Goals and COP21. This will include further capacity building in partnership with World Bank and United Nations Development Programme (UNDP).

#### The Urban Electric Mobility Initiative

The UN-Habitat led initiative aims to:

- Increase the market share of electric vehicles in cities to at least 30% of all new vehicles sold (including cars and motorized 2-3 wheelers) on an annual basis by 2030 while simultaneously developing enabling infrastructure for their effective use.
- Achieve a 30% reduction of CO<sub>2</sub> emissions in urban areas by 2030 through increased use of electric mobility for private and public passenger transport and freight transport, combined with measures to reduce transport demand and to increase use of public and non-motorized transport.

Currently, UEMI is in the process of assessing the potential of shifting towards a sustainable transport pathway and the role electric mobility can play in this transition in Europe, Asia and Latin America. It is also in the process of developing a tool kit on urban electric mobility.

#### Vehicle fuel economy energy efficiency accelerator

This FIA Foundation led initiative on fuel economy is based on the premise that technology is currently available to double fuel economy and reduce fuel waste. It calls for:

- Achieving the GFEI target, of doubling by 2030 the efficiency of all new vehicles and by 2050 doubling the efficiency of the entire global vehicle fleet.
- Saving over 1 Gt of CO<sub>2</sub> a year by 2025 and over 2 Gt/yr by 2050, and thus reducing annual oil imports worth over USD 300 billion in 2025 and USD 600 billion in 2050.
- Countries working with the GFEI under this accelerator are committing to develop national fuel economy policies, with national support from the private sector and NGOs, and global support from international finance institutions and UN agencies.
- GFEI's '100 for 50by50' campaign<sup>67</sup> aims to engage 100 countries in the GFEI's work as a practical contribution leading up to COP21.

To realize its scaled up ambition of 100 countries, GFEI has expanded its network of pilot countries through a range of outreach processes such as training workshops and meetings. The GFEI has achieved global recognition as the lead fuel economy initiative, for example securing the endorsement of the G20 in Brisbane in November 2014.

#### **Global Green Freight Action Plan**

Over 20 committed governments and dozens of NGOs and companies are brought together under the Climate and Clean Air Coalition-coordinated Global Green Freight Action Plan to expand, harmonize and scale up freight programs that reduce black carbon, particulate matter, CO<sub>2</sub> and other emissions from global freight transport, by:

- Aligning and enhancing existing green freight efforts through knowledge sharing, peer-to-peer partnerships, and government industry exchanges.
- Expanding and improving green freight practices in interested countries to build bridges among policy makers, business leaders and civil society at the global level.

<sup>66</sup> UITP. 2015. Mobility in Cities Database. http://bit.ly/1BauSUe

<sup>67</sup> http://www.fiafoundation.org/blog/2015/may/gfei-launches-100-countries-target-in-new-york

• Identifying ways to incorporate black carbon, particulate matter and other air pollutant emission reduction calculations in green freight programs.

Since the September 2014 Climate Summit, an extensive Stakeholder Consultation Process resulted in the launch of the Global Green Freight Action Plan<sup>68</sup> at the International Transport Forum in May 2015. A corresponding website<sup>69</sup> is under development to act as a clearing-house for information on green freight programs, which will also host the web-based Action Plan, to more easily accommodate new actions that support the goals of the Plan.

#### **Emerging Climate Commitments**

A number of additional transport commitments are being developed in the wake of the Secretary General's Climate Summit and in the context of the Lima Paris Action Agenda (LPAA). Since these are more recent commitments, collective impact to date is modest, but it is expected that these commitments will play an important role in expanding the scope and scale of actions toward sustainable development and climate change goals.

#### MobiliseYourCity

This French-German initiative led by CODATU supports developing and transition cities and countries to design more liveable and prosperous cities, and to reduce traffic congestion, road fatalities, noise and air pollution, and CO<sub>3</sub> emissions. The initiative aims to:

- Engage at least 100 cities in the establishment or revision of a Sustainable Urban Mobility Plan (SUMP) between 2016 and 2020 to improve urban transport for both passengers and goods and reduce CO<sub>2</sub> emissions by at least 50% by 2050.
- Accompany national governments in the establishment of National Urban Transport Policies (NUTPs) including financing schemes and monitoring tools.
- Offer cities and countries access to financing, technical assistance and capacity building to set up SUMPs and NUTPs
- Develop a comprehensive methodological framework, to share best practices, support access financing, and promote cityto-city cooperation.

With the support of a coalition of international partners (e.g. development agencies, urban and transport planning agencies, NGOs, development banks), MobiliseYourCity provides capacity building and technical assistance, and facilitates access to financing at both local and national levels.

#### **C40 Cities Clean Bus Declaration**

The cities of the Low Emission Vehicles Network collectively created an International Declaration on Clean Buses, demonstrating a commitment by signatory C40 cities to reducing emissions and improving air quality by incorporating low- and zero-emission buses in their fleets.

- Twenty-three signatory cities, representing bus fleets totaling 166,876 vehicles ahave committed to incorporate over 25% (or more than 40,000) low- and zero-emission buses in their fleets by 2020.
- Utilizing low-emission technologies in all new buses in these cities by 2020 could yield almost 900,000 tons per year in GHG savings, which will only be possible if clean buses are affordable for these cities.

The Declaration calls for action by manufacturers, public transport operators, leasing companies, multilateral development banks and other funding agencies to support city ambitions to decarbonize urban mass transport.

#### **Cycling Delivers!**

The initiative led by the World Cycling Alliance (WCA) and the European Cycling Federation (ECF) focuses on promoting a modal shift to cycling worldwide and doubling cycling in Europe by 2020, with the following goals:

- Show the importance of cycling in achieving the UN Sustainable Development Goals, with special attention to climate action.
- Showcase the ambitions of cities to increase the modal share of cycling worldwide and to double cycling in Europe by 2020.
- Mobilize support of WCA and ECF members to enable local, national and international governments and institutions to scale up action on cycling.

The initiative is currently compiling an initial list of cities that will support the commitments.

#### **Airport Carbon Accreditation**

Airport Carbon Accreditation is an independent program administered by WSP | Parsons Brinckerhoff. It is the first institutionally endorsed carbon management program specifically designed for the airport industry. This carbon reduction initiative collectively engages the airport community to address the impact of aviation on climate change.

<sup>68</sup> http://www.globalgreenfreight.org/GreenFreightActionPlan\_May2015.pdf

<sup>69</sup> http://globalgreenfreight.org

Since May 2014, Airport Carbon Accreditation has been extended to the North America and Latin America and the Caribbean regions of Airports Council International (ACI), establishing a global reach.

- As of September 2015, 129 airports have been accredited, representing 29% of world passenger traffic.
- Among these airports, 20 are at Level 3+ (carbon neutrality), with these carbon-neutral airports representing 27.5% of global passenger traffic.
- In 2014-2015, accredited airports reduced CO<sub>2</sub> emissions under their direct control by 212,000 tonnes, compared to the average emissions of the 3 previous years.

This initiative provides the airport industry with valuable benefits, including reduced CO<sub>2</sub> emissions, improved energy efficiencies, and increased potential for knowledge transfer.

#### **International Zero-Emission Vehicle Alliance**

The International Zero-Emission Vehicle Alliance aims to:

- · Accelerate adoption of zero-emission vehicles (ZEVs), including electric vehicles, plug-in hybrids and fuel-cell vehicles
- Support the achievement of national, urban and regional, and city climate change commitments through scaling up of ZEVs.
- Foster collaboration on policies to promote the advancement of investment and innovations required to achieve ZEV targets.

#### **Navigating a Changing Climate**

The multi-stakeholder partners in PIANC's 'Think Climate' coalition envision a responsible, and innovative sector, with the following goals for owners, operators and users of waterborne transport infrastructure in all countries:

- Deliver integrated, sustainable solutions for waterborne transport, while promoting the shift to low-carbon inland and maritime navigation infrastructure.
- Build capacity and enhance decision-making on mitigation and adaptation options, while developing sector-specific technical and institutional resources.
- Improve preparedness and strengthen resilience, with an emphasis on Working with Nature.

#### **ITS for the Climate**

This emerging initiative from ATEC-ITS France and TOPOS Aquitaine and other partners, is working to facilitate the deployment and operation of ITS services with measurable and verifiable effects to reduce CO<sub>2</sub> emissions in the transport sector, with the following aims:

- Facilitating integration of transport modes for people and goods, and promote efficient navigation of vehicles, while reducing congestion and supporting traffic management.
- Encouraging local authorities to develop clear mobility policies based on intermodality to make better use of investments in infrastructure, vehicles and training.
- Sharing best practices and identifying best opportunities for deployment of ITS to reduce CO<sub>2</sub> and associated GHG emissions from the transport sector.

The commitment partners are currently assessing the desirability and feasibility of a global action plan on ITS and climate change, which will be the topic of discussion at the ITS World Congress in October 2015.

#### **Summary**

Commitments made at the Climate Summit 2014 continue to build momentum as negotiations ramp up on the road to COP21. These actions, together with emerging commitments on cycling, clean buses, zero emission vehicles, waterborne transport, urban mobility planning, airports and intelligent transport services will be key factors in implementing ambitious action on climate change in the transport sector in the coming decades.

# Review of other Commitments and Initiatives in support of sustainable transport

#### **Cities**

As noted previously, 2015 is a critical year for both sustainable development and climate change, and it is clear that national governments can not shoulder the entire load; therefore, cities must also play a key role in assuring that sustainable, low carbon transport makes its contribution to emerging sustainable development and climate change policies.

There is a growing number of initiatives on sustainable, low carbon transport, in which action is taken by cities, mayors or civil society. Nine relevant commitments by city initiatives are shown in Table 10:

Name of Commitment	Organization(s)
Compact of Mayors	UN, C40, ICLEI, UCLG, UN-Habitat
Kyoto Declaration for the promotion of ESTs in Cities	UNCRD, Ministry of the Environment of Government of Japan, and CAI-Asia
Under20 MoU, Sub National Global Climate Leadership Memorandum	Government of California, and Government of Baden- Württemberg
Civitas	European Union
Covenant of Mayors	Climate Alliance, Council of European Municipalities and Regions, Fedarene, Eurocities and Energy Cities
"Do the Right Mix"-Sustainable Urban Mobility Campaign	DG Mobility and Transport of the European Commission
European Mobility Week	European Commission, Eurocities, ICLEI, Regional Environmental Center for Central and Eastern Europe
Eltis, The Urban Mobility Observatory	Intelligent Energy Europe program, European Commission
Market Place of the European Innovation Partnership on Smart Cities and Communities	European Commission

#### **Table 10. List of city transport commitments**

(\*Abbreviations: **C40** - C40 Cities Climate Leadership Group, **CAI-Asia** - Clean Air Initiative for Asian Cities, **ICLEI** - ICLEI – Local Governments for Sustainability, **UCLG** - the United Cities and Local Governments, **UN** – United Nations, **UN-Habitat** – United Nations Human Settlements Programme, **UNCRD** – United Nations Centre for Regional Development)

#### **Compact of Mayors**

Launched at the 2014 United Nations Secretary-General's Climate Summit, the Compact of Mayors is the world's largest coalition of city leaders addressing climate change by pledging to reduce GHG emissions, tracking progress and preparing for the impacts of climate change. The coalition was organized by United Nations Secretary-General Ban Ki-moon and UN Special Envoy for cities Michael Bloomberg during the UN Secretary-General Climate Summit. The purpose of the Compact is to show what cities around the world are doing to reduce their emissions, with the following objectives:

- Showing the extent of action cities are already undertaking, so that it might be incorporated in national level strategies or supported through enabling policies.
- Encouraging increased capital flows into cities to support local action on reducing GHG emissions through enhanced resourcing approaches.
- Demonstrating the commitment of city governments to contribute positively towards more ambitious, transparent, and credible national targets.
- Establishing a consistent and transparent accountability framework that can be used by national governments, private investors or the public.

The main organizations overseeing the Compact of Mayors include the C40 Cities Climate leadership group, Local Governments for Sustainability (ICLEI) and the United Cities and Local Governments (UCLG). Currently 154 cities have signed on to the Compact of Mayors.

#### Kyoto Declaration for the promotion of Environmentally Sustainable Transport (EST) in Cities

This UNCRD-led declaration among many key cities in Asia aims to lead the way in promoting the use of environmentally sustainable modes of transport. All mayors that sign on to the declaration are committing to demonstrate leadership in promoting EST and

establishing a vision for sustainable transport in close collaboration with national governments, the private sector, civil society, and regional and international communities.

The Kyoto Declaration had 22 initial signatories, and an additional 29 cities in Asia have signed on since the original Declaration.<sup>70</sup>

#### Under 2 MOU, Sub National Global Climate Leadership Memorandum

The Under 2 MOU originated from a partnership between the states of California (United States) and Baden-Württemberg (Germany) out of a desire to bring together ambitious states and regions willing to make key commitments towards emissions reduction and to help galvanize action at COP21. Central to the agreement is that all signatories agree to reduce their GHG emissions 80 to 95%, or limit to 2 metric tons CO<sub>3</sub>-equivalent per capita, by 2050.

18 states and provinces in nine countries and four continents have signed up to the MoU, and out of those 12<sup>71</sup> regional governments have made commitments to increase the provision of sustainable transport.

#### **Civitas**

Civitas is an initiative co-funded by the European Union, which aims to help European cities redefine their transport policies to create cleaner and better transportation systems. So far, Civitas has helped about 60 "demonstration cities" to implement innovative measures to develop greener transport.

To achieve its goals, Civitas relies on exchange among cities by managing several networks and working groups on specific transport topics, and compiling best practices in sustainable transport for wider dissemination. Civitas also provides funding for transfer of smart measures from one city to another.

At present, the Civitas initiative has a database of more than 700 mobility related commitments.

#### **Covenant of Mayors**

The Covenant of Mayors is a joint initiative developed and administered by five of the largest city networks in Europe (i.e. Climate Alliance, Council of European Municipalities and Regions, Fedarene, Eurocities and Energy Cities). The Covenant is the mainstream European movement involving local and regional authorities, voluntarily committing to increasing energy efficiency and use of renewable energy. Covenant signatories aim to meet and exceed the European Union 20% CO<sub>2</sub> reduction objective by 2020.

The transport-related submissions are generally local pledges in a range of different forms, from improving public transport to increasing accessibility for cyclists. In planned actions towards 2020 from signatories to the Covenant of Mayors that have already been assessed and approved by the Joint Research Centre of the European Commission, 24% involve sustainable transport, with an estimated total reduction of 117 TW/h, equivalent to the total energy consumption of the Netherlands.

#### "Do the Right Mix" Sustainable Urban Mobility Campaign

The Sustainable Urban Mobility Campaign is an initiative launched by the Mobility and Transport area of the European Commission in 2012. The initiative aims to support sustainable urban mobility campaigners in the European Union's 28 member states, plus Norway, Iceland, and Liechtenstein. Under the slogan "Do the Right Mix", it advocates the use of different modes of transport to help reduce the cost and impact of each journey. In addition, the campaign helps local authorities to promote their own efforts to advance smarter uses of transport systems, and Mobility Plans Awards are given each year to the best projects.

"Do the Right Mix" has recently joined forces<sup>72</sup> with the annual European Mobility Week (see following section), which encourages European cities to promote the use of sustainable transport and invite local residents to try alternative forms of transport.

#### **European Mobility Week**

European Mobility Week is organized each September to promote innovative mobility measures by local authorities, to encourage exchanges with citizens on themes related to urban mobility, and to find concrete solutions to related issues such as urban air pollution. The initiative is supported by the Directorates-General for the Environment and Transport of the European Commission.

In 2015, more than 1700 cities participated in European Mobility Week.<sup>73</sup>

<sup>70</sup> UNCRD. Asian Mayors' Policy Dialogue for the Promotion of Environmentally Sustainable Transport (EST) in Cities - Signing of the Kyoto Declaration. http://bit.ly/1gF9XPq

<sup>71</sup> Under 2 MOU: Signatories. http://under2mou.org/?page\_id=238

 $<sup>72 \</sup>quad http://www.mobilityweek.eu/fileadmin/files/Newsbits\_2015/4-April/DoTheRightMix-Announcement.pdf$ 

<sup>73</sup> http://www.mobilityweek.eu/cities/

#### **Eltis, The Urban Mobility Observatory**

Eltis is an online portal launched by the Intelligent Energy Europe program focused on urban mobility and related issues (e.g urban and regional development, health, energy and environment). The goal of this initiative is to facilitate exchange of information and experience among different stakeholders through a website providing case studies, tools (e.g. guides, online resources) and other resources (e.g. review of European policies, statistics, training resources) for professionals in the field of urban mobility.

At present, there are more than 500 registered cities included in the Urban Mobility Observatory.

#### Market Place of the European Innovation Partnership on Smart Cities and Communities

Market Place of the European Innovation Partnership on Smart Cities and Communities provides a forum for local actors who are seeking to improve cities and documents relevant strategies to gradually shift all cities in Europe to smart cities.

The Partnership on Smart Cities and Communities website includes more than 270 transport related commitments.<sup>74</sup>

# Review of Sustainable Transport Commitments in Intended Nationally Determined Contributions (INDCs)

In addition to the sub-national commitments noted in previous sections, which offer opportunities for cooperation by the voluntary transport commitments, there is recently also an increase in national-level commitments on sustainable transport that can serve as cooperation partners to the organizers of the commitments on sustainable transport. This concerns the UNFCCC's mechanism of intended nationally determined contributions<sup>75</sup> (INDCs). INDCs are national-level commitments on climate change mitigation and adaptation that are encouraged by the UNFCCC to ensure that mitigation efforts by all Parties are guided by national development priorities, equity, and common responsibility.

As of September 16, 2015, a total of 34 INDC submissions representing 55 parties (countries) had been submitted to the UNFCCC. These countries represent more than 65% of global GHG emissions and more than 60% of the total global transport GHG emissions. Though it is not required for INDCs to state sectoral targets (e.g. transport), a number of individual countries have taken steps to spell out transport-specific mitigation strategies.

Table 11 indicates all INDCs that have been submitted as of September 16, 2015. While the transport sector is acknowledged in all INDC's (at least implicitly, through the energy sector), a more limited number of countries have translated 2030 economywide targets into transport sector-specific targets and/or specific mitigation strategies in the transport sector. As noted, transport sector-related targets emphasize reduction in magnitude of reductions relative to a base year and sometimes relative to a BAU baseline.

Country	Transport Sector Target	Proposed Transport Interventions
Andorra		
Australia		
Benin		
Canada		
China		
Colombia		
D.R Congo		
Djibouti		
Dominican Republic		
Ethiopia		
European Union		
Gabon		
Iceland		

<sup>74</sup> Market Place of the European Innovation Partnership on Smart Cities and Communities: List of commitments. https://eu-smartcities.eu/commitments

<sup>75</sup> The term "contribution" is a compromise to unify "commitments" (developed countries) and "nationally appropriate mitigation actions" (developing countries). Some Parties understand "contributions" to cover mitigation only, while others incorporate adaptation, finance, capacity building and technology transfer.

Country	Transport Sector Target	Proposed Transport Interventions
Indonesia		
Ivory Coast		
Japan		
Jordan		
Kenya		
Liechtenstein		
Macedonia		
Mexico		
Marshall Islands		
Monaco		
Morocco		
New Zealand		
Norway		
Republic of Korea		
Republic of Serbia		
Russia		
Singapore		
Switzerland		
Trinidad and Tobago		
United States of America		

**Table 11. Transport sector targets and interventions of INDCs** 

In addition to defining transport sector targets (as has been done by a relatively small group of countries), a larger number of countries are defining specific measures in the transport sector to support economy-wide mitigation strategies. A sample of these countries is given here<sup>76</sup>:

Australia has established a National Energy Productivity Target to achieve a 40 per cent improvement in energy efficiency between 2015 and 2030, which includes an investigation of opportunities to improve the efficiency of light- and heavy-duty vehicles.

Benin has pledged as part of its INDC to improve traffic flow in large cities; to develop a river-lagoon transport system with navigable rivers; to modernize and extend its rail infrastructure; and to further develop collective urban transport.

China's proposed transport interventions in its INDC include increasing fuel quality and promoting alternative fuels; increasing the mode share of public transport in in large- and medium-sized cities to 30% by 2020; promoting dedicated pedestrian and bicycle infrastructure in cities; and accelerating the development of green freight.

**Djibouti** in its INDC refers to constructing a railway line between Djibouti City and Addis Ababa, Ethiopia, with commissioning scheduled for October 2015.

**Gabon**'s INDC was the first to detail a number of specific interventions, which include infrastructure investments for many planned transport routes, additional public transport services to reduction congestion in Libreville, and restrictions on importation of vehicles that are more than three years old.

**Ivory Coast** has committed to integrating energy and climate considerations in territorial planning to limit travel distances; proposing efficient policies in urban transport plan development (e.g. urban train in Abidjan); and accelerating the purchase of low-emission vehicles through standards and incentives.

Japan through its INDC pledges to incorporate broad-reaching improvements in the transport sector, which include promoting modal shift to public transport and railways; improving fuel efficiency, and promoting next-generation automobiles; developing traffic safety facilities and improving traffic flow through Intelligent Transport Systems (ITS); promoting driverless cars, eco -driving and car sharing; and introducing comprehensive low-carbon strategies for the aviation and maritime sectors.

<sup>76</sup> Information on planned transport interventions is taken from individual INDCs submitted to the UNFCCC (see http://www4.unfccc.int/submissions/INDC/Submission%20Pages/submissions.aspx).

Jordan's proposed transport interventions include increasing public transport mode share to 25% by 2025; in its INDC Jordan commits to reducing vehicle fuel consumption and emissions (i.e. CO<sub>2</sub>, CO, PM, NOx); and reducing vehicle travel, particularly in densely populated areas.

Under Morocco's INDCs, the transport sector is specifically addressed with an intention to reduce energy consumption by 23% below BAU by 2030. Under its INDC, Morocco has proposed significant reduction of fossil fuel subsidies and increasing the use of natural gas, and has also proposed to develop a national plan to combat short-lived climate pollutants (SLCPs). With transport a significant contributor to black carbon emissions (about 19% globally), Morocco may propose additional actions on reducing diesel consumption in transport sector.

#### **Summary of Transport-Related INDCs**

To summarize the country-specific transport measures of the INDCs submitted to date (September 16, 2015), Figure 4 shows the distribution of measures by thematic area, revealing that energy efficiency, renewable energy and public transport are included in at least a quarter of transport measures submitted in INDCs to date, while other approaches make up an insignificant share of INDC transport measures.

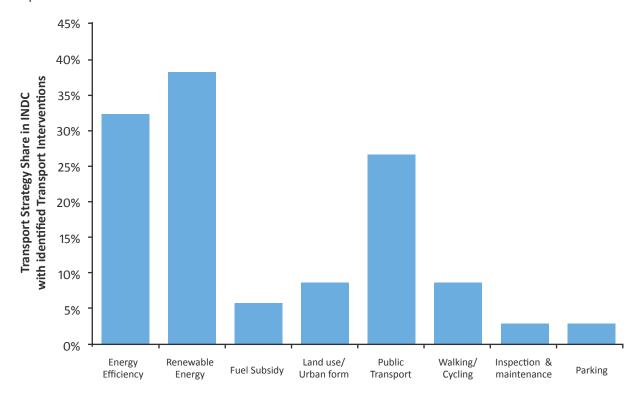


Figure 4. Transport strategy share in INDCs with identified transport interventions (by thematic area)

The distribution of measures by transport subsector in Figure 5 reveals that passenger transport dominates transport measures submitted in INDCs to date, while freight transport receives relatively less attention. Furthermore, urban transport makes up a significant share of stated transport measures, while railways, waterways, and aviation strategies lag behind.

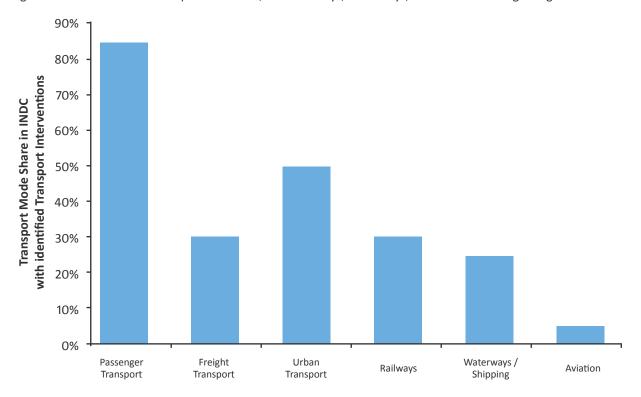


Figure 5. Transport strategy share in INDCs with identified transport interventions (by transport subsector)

#### **Conclusions**

Through the examples described in this chapter, we see a continued willingness from the transport sector to engage in voluntary commitments to reduce the impact of sustainable transport infrastructure, services, and policies (e.g. Rio+20 and follow-on commitments, SG Climate Summit Initiatives, emerging commitments), creating in essence a set of 'supply-side' commitments. At the same time, there is a growing interest from cities and countries to engage in sustainable low carbon transport initiatives and implementation measures (e.g. city commitments, business sector commitments, and transport-focused INDC targets and measures), creating a set of complementary 'demand-side' commitments. Analysis shows that there is a remarkably good fit between the areas where cities and countries would like to take action on transport for both the sustainable development and climate change oriented transport commitments.

The combination of these two commitment types creates a key opportunity for 'match-making' across among supply-side and demand-side commitments, which has the potential to create further momentum among existing commitments and generate new commitments to accelerate action on sustainable low carbon transport in the coming decades.

### Section III.

### **Assessment of Voluntary Commitments in the Transport Sector**

"We must fulfill and expand on all the pledges and initiatives brought forward today. As we walk together on the road to Paris in December 2015, let us look back on today as the day we decided – as a human family – to put our house in order to make it livable for future generations."

- Ban Ki-moon, Secretary General's Climate Summit, September 2014

#### **Linkage among Transport Commitments and SDG Targets**

The previous chapter described the different transport related commitments developed in response to global processes on sustainable development and climate change. It was concluded that across all commitments progress was being made in their implementation. At the same time cities and countries are increasingly starting to develop transport specific commitments and actions.

For transport commitments to be effective in contributing toward the SDGs it is important to consider how the different commitments contribute to the transport-related SDG targets under the SDGs.

Overall, there appears to be a good fit between the thematic focus of the transport commitments and the transport related targets, as shown in Table 12 (based on the correlation of commitments and targets in Annex II).

Area of Commitment Focus	SDG Targets Impacted	Example Commitments <sup>77</sup>
1. Public and	Target 3.9 (air quality)	Principles for Transport in Urban Life, Cycling delivers!, C40 Cities Clean Bus
non-motorized	Target 7.3 (energy efficiency)	Declaration of Intent, MobilizeYourCity, Urban Electric Mobility Initiative,
transport	Target 9.1 (sustainable infrastructure)	Commitment to Sustainable Transport, Doubling the market share of public
	Target 11.2 (urban transport)	transport worldwide by 2025, Pas-Port To Mobility, Principles for Bus Rapid
	Target 12.c (fuel subsidies)	Transit Systems, Promoting Environmentally Sustainable Transport (EST),
	Target 13.2 (climate change mitigation)	Results-Based National Urban Transport Policy and Finance, Scaling Up
		Sustainable Transport Solutions Worldwide, UIC Declaration on Sustainable
		Mobility, Evaluating Impacts of Sustainable Transport Voluntary Commitments,
		Tracking Environmentally Sustainable Transport (TEST), Climate Change
		Adaptation for International Transport Networks (CCAITN), Urban Mobility
		Observatory (UMO), Low-Carbon Sustainable Rail Transport Challenge,
		Declaration on Climate Leadership, Cycling delivers!
2. Fuel and Vehicle	Target 3.9 (air quality)	Promote the development and implementation of fuel economy standards and
Efficiency	Target 7.3 (energy efficiency)	policies across the globe, Vehicle Fuel Efficiency Accelerator, International ZEV
	Target 12.c (fuel subsidies)	Alliance, Promote and support the reduction of Particulate Matter/Black Carbon
	Target 13.2 (climate change mitigation)	emissions from transport through the introduction of cleaner, low sulphur fuels
		and cleaner vehicles through adoption of vehicle emissions standards, For Future
		Inland Transport Systems (ForFITS),
3. Road Safety	Target 3.6 (road safety)	Creating a world free of high-risk roads, UNECE Road Safety Activities, Protecting
	Target 9.1 (sustainable infrastructure)	children from traffic injuries and improving their urban environment
4. Freight and	Target 9.1 (sustainable infrastructure)	Promoting Green Freight in Europe and Asia, Global Green Freight Action Plan,
Logistics and	Target 3.9 (air quality)	Navigating a changing climate
transport	Target 13.1 (climate change adaptation)	
infrastructure	Target 13.2 (climate change mitigation)	
5. Urban Planning	Target 9.1 (sustainable infrastructure),	Market Place of the European Innovation Partnership on Smart Cities and
and Infrastructure	Target 11.2 (urban transport)	Communities, ITS for the Climate, Building Institutional and Political Capacity
	Target 13.1 (climate change adaptation)	for Urban Sustainable Mobility, CAPSUT-"Capacity Building on Sustainable
	Target 13.2 (climate change mitigation)	Urban Transport"

Table 12. Relationship among transport commitments' thematic areas and SDG targets

<sup>77</sup> Examples are indicative, commitments contribute in many cases to multiple SDG Targets

A more detailed analysis<sup>78</sup> of the correlation of commitments and transport targets shows that a significant majority of commitments in each category contribute to the SDG direct transport targets in the areas of sustainable transport infrastructure (Target 9.1) and urban transport (Target 11.2), and to a somewhat lesser extent, energy efficiency (Target 7.3). Among direct transport targets, targets on road safety (Target 3.6) and fossil fuel subsidy (Target 12.c) have received relatively less attention, as shown in Table 13.

		Direct Transport Targets											
Transport Commitments	3.6: Road Safety	7.3: Energy Efficiency	9.1: Sustainable Infrastructure	11.2: Urban Access	12.c: Fuel Subsidies								
Rio+20 Commitments (2012)													
Follow-on Commitments (2013)													
Climate Summit Commitments (2014)													
Emerging Commitments (2015)													
Total													

Table 13 Correlation between transport commitments and direct SDG targets<sup>79</sup>

Level of Correlation:
Very Weak
Weak
Moderate
Strong
Very Strong

Among indirect transport targets, those focusing on reducing impacts to air quality (Target 3.9) and sustainable cities (11.6) are addressed by a significant majority of commitments. Rural transport issues are underrepresented among transport commitments (e.g. relatively few commitments are focused on agricultural productivity (Target 2.3), access to drinking water (Target 6.1), and reducing food waste (Target 12.3), as shown in Table 14.

	Indirect Transport Targets											
Transport Commitments	2.3: Agricultural Productivity	3.9: Air Pollution	6.1: Access to Safe Drinking Water	11.6: Sustainable Cities	12.3: Food Loss and Waste	13.1: Climate Change Adaptation	13.1: Climate Change Mitigation					
Rio+20 Commitments (2012)												
Follow-on Commitments (2013)												
Climate Summit Commitments (2014)												
Emerging Commitments (2015)												
Total												

Table 14. Correlation between transport commitments and indirect SDG targets<sup>80</sup>

Level of Correlation:
Very Weak
Weak
Moderate
Strong
Very Strong

Significant in both the case of direct and indirect transport related targets is the contribution of climate change oriented commitments, which is almost as high as the sustainable development oriented commitments.

Climate Summit transport commitments are as expected strongly focused on climate change mitigation but give relatively less attention to climate change adaptation.

<sup>78</sup> This analysis is based on Annex 1

<sup>79</sup> The level of correlation between the transport commitments and the direct transport targets are calculated based on the scoring given in Annex II

<sup>80</sup> The level of correlation between the transport commitments and the indirect transport targets are calculated based on the scoring given in Annex II

The above observations establish a collective assessment of transport commitments as determined by their initial thematic areas. To build upon this assessment, the following section conducts an assessment of the value added by the overall voluntary commitment approach.

#### **Value added of Transport Commitments**

The existing voluntary transport commitment approach is useful in defining commitments with a discrete and tangible set of deliverables with concrete action plans and target timeframes. Yet, in assessing the overall effectiveness of the transport commitment paradigm, it is necessary to consider both (a) the effectiveness of the overall transport commitment approach in accelerating action on sustainable, low carbon transport, and (b) the effectiveness of the commitments themselves in driving change and spurring further action on sustainable transport.

The commitment approach has resulted in considerable action and intention across the transport sector, which is captured in the breadth and ambition of the commitments described in the previous chapter. It unlikely that, in the absence of enabling policies in many of these countries, we would have seen such consolidated action by the transport sector itself if it were not for the transport commitments framework.

The commitment approach is helping to give the transport sector a stronger and more unified voice in global processes on sustainable development and climate change by forging broader partnerships. For example, the Paris Process on Mobility and Climate (PPMC), which was created as a joint initiative of SLoCaT and Michelin Challenge Bibendum (MCB), is bringing together different actors to speak with common messages on the contribution that sustainable mobility can make to climate change mitigation and adaptation, with a focus on COP21. The willingness of the transport sector to take action at key junctures in global policy making on sustainable development and climate change is resulting in a gradual scaling up of transport's inclusion in these global processes.

The commitments are helping to forge coordination among stakeholders whose actions will be more effective in cooperation than in isolation. One example is the MDB commitment, which has initiated discussion among MDBs on how to assess sustainable transport projects more broadly, and has led to the development of the (STAR) tool to create a structured framework for evaluation. Another example is the Mobilise Your City commitment, which demonstrates concerted action between a civil society organization (CODATU) and a national development agency (AFD), with the intended support of the French ministry for sustainable development and ecology and German ministries for environment and international cooperation.

As demonstrated by the assessment in this report, the commitment approach is dependent to a large extent on having political processes that rally organizations to make commitments (e.g. Rio+20, SG Climate Summit, COP21). This dependence on high-level political processes comes with risks, however, as there is an obvious danger that organizations may make commitments, without giving proper consideration to their long-term implications.

The Transport Community has an excellent opportunity in 2016 with Habitat III to maintain and build further momentum on transport commitments, as most sustainable development and climate change commitments have a strong urban dimension. To capitalize on the potential of Habitat III, the transport sector is probably best advised by focusing on existing transport commitments, rather than setting up new and additional commitments, as creating additional commitments carries a high risk of repackaging existing commitments into a new Habitat III narrative.

High-profile political events on sustainable development and climate change can also help drive further 'demand-side' transport commitments from cities and countries. Cities and countries will be more inclined to include transport in city climate commitments and national level INDCs if there are clear signals from the transport sector that they are willing to work with cities and countries in implementing sustainable, low carbon transport solutions. This can create a positive feedback loop for transport commitments by non-state actors by helping to create and/or increase demand for their commitments.

Current commitment timeframes of 15 years (or longer) can also be a challenge, as few organizations are able to set out an effective 15-year implementation framework at the outset. Thus, there is an imminent danger that work is being front-loaded without giving full consideration to what will happen in the second half of the commitment period, and therefore the potential contribution of the transport commitment may be reduced over time.

The overall transport commitment approach is effectively ad-hoc in character. To help ensure that the transport commitments are effectively implemented over a 15-year period, a structure is required to inspire, nurture and monitor the commitments. Experience has shown that there are clear advantages involved to have UN agencies or national governments involved in promoting and tracking of commitments; however, in the case of the transport sector the capacity and willingness of the UN

and/or governments to be associated with voluntary transport commitments is often linked to political events. This implies that future institutional arrangements will need to be multi-stakeholder in character with a substantive involvement of the transport sector itself.

Effective coordination of transport commitments requires a mandate to coordinate, an organizational willingness to monitor and report, and sufficient resources to support commitment-makers. In the post-2015 process, the High Level Political Forum (HLPF) was established to assess the effectiveness of the SDGs and to promote action that can help realize the SDGs. While there is reference to Partnerships in the SDGs, these are often construed as global (e.g. North-South) Partnerships; thus, it would be helpful if the HLPF interpretation of partnerships extended to main sectors and themes as well. Such encouragement can go a long way in giving multi-stakeholder approaches the legitimacy and trust required to help facilitate the implementation of existing and forthcoming transport commitments.

Consideration of the effectiveness of transport commitments themselves in driving change and spurring further action on sustainable transport yields several observations. Individual commitments have made substantive contributions to SDG and climate change targets to date (as described in Section II), and the growing number and scope of commitments over time has increased coverage of the SDG targets and has generated momentum for emerging commitments in the run-up to the SDG summit and COP21. Thus, positive outcomes of individual commitments are readily apparent.

Individual transport commitments may lead to the launch of complementary commitments or integrating initial commitments in newer and more specific commitments. There are a number of climate change oriented commitments that had their roots in the Rio+20 commitments (e.g. the UIC Low Carbon Sustainable Rail Transport Challenge and the UITP Declaration on Climate Change Leadership). Likewise, specific commitments like the Urban Electric Mobility Initiative can trigger additional commitments, which then offer the possibility for consolidation.

While all transport commitments start off enthusiastically, there are instances of commitments where this enthusiasm is starting to wane, while on the other hand, some commitments have increased their levels of ambition and have expanded the scope of their partnerships over time. In addition, we can also see a considerable differentiation in governance and self-reporting structures among commitments, which has the potential to yield significantly different outcomes over the life of the commitment.

Many of the voluntary commitments have been established with the hope of attracting additional funding for full implementation, and where such funding has not materialized, the quality of the commitment (and commitment to its implementation) starts to waver. Thus, it is necessary to ensure that commitments are matched with required funding streams to ensure the long-term success of the commitment.

#### **Summary**

Transport commitments have yielded measurable impacts in a short period of time, but it is possible to further increase ambition and maximize effectiveness of initial commitments. The transport commitments approach, aided and enabled by a series of high-level global events, from 2012-2015, has demonstrated its potential to accelerate much-needed actions on climate change and sustainable development by non-state actors in the transport sector, and to give transport a stronger voice in global processes on sustainable development and climate change. The current ad-hoc mechanism, in terms of nurturing, inspiring and tracking the transport commitments, is likely insufficient to address the gaps inherent in the correlation among transport commitments and SDG targets.

To increase the effectiveness of the current transport commitment mechanism, the following actions could be considered:

- Create a mechanism to identify gaps in sustainable development and climate change frameworks, and define cooperative commitments for the transport sector to address these gaps (e.g. the relatively weak focus on rural issues).
- Create supportive mechanisms to provide sufficient funding to allow transport commitments to maintain and increase ambition over time.
- Align transport commitments on a regular basis to create a consistent and predictable timeframe to review/renewal/ repackaging, and to increase the potential for increased coordination and cooperation.
- Increase attention to policy change in forthcoming commitments to ensure that they both drive and are driven by supportive policies.
- Use ongoing political processes to highlight progress toward current and ongoing transport commitments, rather than as a primary forum to generate new commitments.

### Section IV.

# Tracking the SDGs and future contribution of Voluntary Commitments in Transport Sector

"We have an opportunity to avoid the negative environmental, social and economic impacts of unsustainable transport. Making the transition to sustainable transport is crucial to addressing climate change and achieving the Sustainable Development Goals<sup>81</sup>."

- Secretary General Ban Ki-moon, First Ministerial and Experts Conference on sustainable transport Nairobi, 30 October 2014

#### Introduction

Following a broad assessment of the current state of transport commitments in the previous chapter, this chapter deals with the importance of ongoing tracking of SDGs in the context of these transport commitments. This is a crucial connection to make for two reasons: (a) to determine relevance of the transport commitments to progress toward transport targets in the SDGs, and (b) to identify transport commitments that can help to develop monitoring frameworks to further track progress toward SDGs in the transport sector.

Monitoring of progress on sustainable transport within the SDG framework is more complex than monitoring progress in other sectors, due to the mainstreaming of transport across at least seven of 17 SDGs<sup>82</sup>. As a result of the dispersed treatment of transport within the SDGs, there is no natural owner or champion to monitor progress.

There is at present not a single UN organization that is clearly tasked to initiate and advance comprehensive monitoring of the transport related targets in the SDGs. Individual UN organizations focus on specific issues (e.g. WHO on road safety, UNEP on environment related targets). External groups like the MDB Working Group on Sustainable Transport, the Partnership on Sustainable, Low Carbon Transport, or the new, International Road Transport Union (IRU) and Global Compact-facilitated, Global Partnership on Sustainable Transport do not have a mandate or the capacity at present to track in a consistent manner the transport targets under the SDGs, the voluntary commitments on transport, as well as the contribution of these voluntary commitments toward the transport targets of the SDGs.

#### **SDG Monitoring Framework**

The current framework for tracking and monitoring progress toward the SDGs and targets is being framed by the United Nations Statistical Commission (UNSC), which created in March 2015 an Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs), composed of Member States and including regional and international agencies as observers. The IAEG-SDGs will provide a proposal of a global indicator framework (and associated global and universal indicators) which is currently under development, and which will be presented for consideration by the Statistical Commission in March 2016, and will subsequently be finalized for implementation for tracking SDGs and targets.<sup>83</sup>

The SLoCaT Partnership has been active in proposing indicators relevant to transport starting with the Open Working Group process that concluded in July 2014. Since then, SLoCaT has provided comments on indicators to the UNSD directly and through members of the IAEG-SDGs. In March 2015, SLoCaT, in consultation with its members, made an extensive analysis of the proposed SDGs and their targets, and transport-related indicators proposed by others (including the Sustainable Development Solutions Network and UN Agencies), to examine potential gaps in the coverage of transport and to make recommendations on how sustainable transport could be best monitored. This has been followed up by submissions at the invitation of the IAEG-SDGs.<sup>84</sup>

<sup>81</sup> Un News Centre. 2014. Remarks at First Ministerial and Experts Conference on Sustainable Transport Africa. http://bit.ly/1NK8t4U

<sup>82</sup> See Section 1 for overview of SDGs with a transport relevance

Partnership on Sustainable, Low Carbon Transport. 2015. Review of Existing and Potential Indicators on Transport to Support the SDGs (Draft in Progress). http://unstats.un.org/sdgs/iaeg-sdgs/index.html

<sup>84</sup> A further set of comments (integrating SLoCaT member input) was forwarded through the IEAG-SDGs portal (http://bit.ly/1IDFxHi) in September 2015 as an input to its ongoing open consultation.

In the process of assessing the proposed indicators within the UNSC framework, SLoCaT has made a number of observations for solidifying the position of transport within the IAEG-SDGs, including the following:

Sustainable transport is reasonably well covered in the current set of IAEG-SDGs indicators with the exception of walking and cycling. The cross-cutting nature of transport continues to be underemphasized. Certain transport-related indicators are relevant to more targets than are currently identified by the IAEG-SDGs. There is still no specific target that highlights the importance of rural access despite that fact that roughly 30% of the global population is expected to continue to live in non-urban areas at 2030.

There is at present also with the transport community not full consensus on how to best track specific transport related targets (e.g. Target 11.2 on urban transport). Building internal consensus is an obvious first step to ensure that transport targets are being tracked with the active support of the sustainable transport community.

#### **Examples of existing monitoring approaches with transport relevance**

A number of established institutionalized monitoring approaches are currently in use that could provide useful analogues for the process of monitoring transport commitments. These approaches include the following:

#### **World Bank Logistics Performance Index (LPI)**

The World Bank's Logistics Performance Index (LPI)<sup>85</sup> is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics. The LPI 2014 allows for comparisons across 160 countries (based on a worldwide survey of global freight forwarders and express carriers), providing feedback on the logistics "friendliness" of the countries in which they operate and with which they trade.

The LPI combines in-depth knowledge of countries of operation with qualitative assessments of trade partners and experience with the global logistics environment. Feedback from operators is supplemented with quantitative data on the performance of key components of logistics chains in countries of operation. The LPI helps build profiles of logistics friendliness by measuring performance along logistics supply chains, while offering both international and domestic perspectives.

The LPI would be well suited to monitor Target 9.1, which covers the development of regional infrastructure in support of trade and logistics.

#### World Health Organization (WHO) road safety biennial report

WHO creates a biennial report on road safety. The 2013 report presents information on road safety from more than 180 countries, which account for almost 99% of the world's population. The report indicates that global road traffic deaths total 1.24 million per year, while only 28 countries (covering just 7% of the world's population), have road safety laws on five key risk factors: drinking and driving; speeding; failing to use motorcycle helmets; seat-belts; and child restraints. This reporting by the WHO fits in well with Target 3.6 on road safety.

#### **Sustainable Energy for All Global Tracking Framework**

Sustainable Energy for All (SE4All) is driven by three objectives: universal access to energy; greater energy efficiency; and increased use of renewables. The first SE4All Global Tracking Framework was released in 2013 and identified indicators that track progress toward objectives of universal access to modern energy, doubling the rate of energy efficiency improvements and doubling the share of global renewable energy consumption. An accompanying report compiled by experts from 15 organizations drew on data from more than 180 countries, which account for more than 95 percent of the world's population. The report also documented the evolution of the indicators between 1990 and 2010 to provide a baseline for assessing progress in the next 20 years.

A second edition of the SE4All Global Tracking Framework provides an update on how fast the world moved toward sustainable energy goals between 2010 and 2012, tracking progress toward the goals mentioned above. The second edition includes work to define a 2015 multi-tier definition of energy access and other innovative monitoring tools. The Global Tracking Framework can also aid in measuring progress towards the proposed Sustainable Development Goal on energy (SDG7).<sup>87</sup>

The SE4ALL Global Tracking Framework provides inspiration on how to develop a robust monitoring framework for sustainable transport. At the same time it can serve as a source for tracking the transport component of Target 7.3 on energy efficiency.

<sup>85</sup> World Bank Logistics Performance Index. http://lpi.worldbank.org

<sup>86</sup> World Health Organization. 2013. Global Status Report on Road Safety 2013. http://bit.ly/1gkk3Pv

<sup>87</sup> Sustainable Energy for All. http://www.se4all.org/tracking-progress/

#### **Voluntary Commitments with a Monitoring Component**

Voluntary transport commitments have role to play in tracking progress towards the transport commitments of the global SDGs. Voluntary transport commitments have the potential to help address these challenges through (a) developing methodologies and indicators and (b) collecting data that contributes to the actual measurement of these proposed indicators. The transport commitments reviewed in this report are taking steps in this direction, which include the commitments listed in Table 15:88

Original Rio+20 Commitments (2012)		
Name of Commitment	Methodology Development	Data Collection
Building Institutional and Political Capacity for Urban Sustainable Mobility	2 son demonstration projects implemented in Africa and Asia (under implementation)	
Commitment to Sustainable Transport	Sustainable Transport Appraisal Rating (STAR) tool	
Creating a world free of high-risk roads	Risk Maps, Star Ratings for road assessment	
Principles for Bus Rapid Transit Systems	BRT Standard	Producing BRTdata.org a go-to site for info on high-performance bus systems
Principles for Transport in Urban Life	TOD Standard with metrics for the Principles for Transport in Urban Life	
Promoting Green Freight in Europe and Asia	Consistent tools and methodologies for carbon measurement and reporting  Updating and localization (India) of the Green Trucks Toolkit  Development of best practice database (under implementation)	Reporting by GFE members of emissions in accordance with the emissions measurement methodology developed (under implementation)
Protecting children from traffic injuries and improving their urban environment	School Area Road Safety Assessment & Implementation	
Promote the development and implementation of fuel economy standards and policies across the globe	Upwards of 20 countries engaged in fuel economy toolkit work by 2015	Tracking fuel economy at country and global levels
Post-Rio+20 Commitments (2013)		
Name of Commitment	Methodology Development	Data Collection
Climate Change Adaptation for International Transport Networks (CCAITN)	Technical adaptation construction parameters / measures for specific transport infrastructure and geographical regions	
Evaluating Impacts of Sustainable Transport Voluntary Commitments	Developing scenarios and using tools such as IEA's Mobility Model (MoMo model) to evaluate baseline and alternative forecasts of GHGs, air pollution, fuel use, infrastructure, vehicle, and operating costs, and travel activity	Data sets on urban transport activity and emissions
For Future Inland Transport Systems (ForFITS)	ForFITS modeling tool	Country and regional data sets

<sup>88</sup> Information provided is illustrative and not exhaustive.

Post-Rio+20 Commitments (2013)							
Name of Commitment	Methodology Development	Data Collection					
Tracking Environmentally Sustainable Transport (TEST)	Updated modeling capabilities for mass transport modes, rail and buses (ongoing)  New modeling platform (on-going)	Various data sets on transport activity, energy related data, and emission related data					
Urban Mobility Observatory (UMO		Data compilation on urban and sustainable transport in cities of the Latin American region will enhance the policy application of data collected					
Climate Summit Commitments (2014	<del>1</del> )						
Name of Commitment	Methodology Development	Data Collection					
Low-Carbon Sustainable Rail Transport Challenge	Harmonisation for the calculation of embodied CO2 in rail infrastructure (on-going)	Annual reporting of rail energy consumption and CO2 emissions in partnership with the International Energy Agency					
Urban Electric Mobility Vehicles Initiative (UEMI)		Monitoring indicators include CO2 emissions, passenger-kms travelled on EVs as percentage of total passenger-km travelled in cities, EV sales/stock as percentage of total vehicles sales and stock					
Vehicle Fuel Efficiency Accelerator		GFEI global dataset on fuel economy levels in countries					
Emerging Initiative (2015)							
Name of Commitment	Methodology Development	Data Collection					
Cycling delivers!		Collecting data of concrete targets from 100+ cities and regions on increase of the modal share of cycling					
MobiliseYourCity	Planning frameworks	City data sets					
Navigating a changing climate	Development of technical guidance on adaptation for maritime and inland waterborne transport (i.e. navigation) infrastructure						

Table 15. Methodology development and data collection examples of transport commitments

#### **Recommended Approaches to a Transport Monitoring Framework**

A more unified monitoring approach (along with a dedicated institutional framework to champion such an approach) is needed to ensure an appropriate tracking framework for transport within the SDGs. Such an approach is necessary to address the challenges in monitoring indicators across a large number of targets, as the direct and indirect transport-related indicators detailed in the previous chapters require data from a broad array of sources at national and global levels, and in many cases required data collection efforts are still under development.

To be successful the transport sector needs to rally together and agree on a common set of indicators and data requirements to produce a robust framework to drive progress toward SDGs and climate change targets.

Based on the previous sections, we can conclude that any future monitoring approach on progress toward voluntary transport commitments is likely to be a combination of (a) indicators for transport targets (e.g. based on the UNSC framework and IAEG-SDG proposals) and (b) monitoring efforts of individual transport initiatives and commitments. It will be important to fully integrate existing institutionalized approaches, such as the monitoring of the Logistics Performance Index, the WHO Road Safety Report, and SE4All.

To effectively track progress toward transport targets, including by transport commitments, it is imperative to have a well functioning institutional arrangement, preferably led by a UN entity, for the monitoring of transport targets. Such an institutional set-up should integrate the efforts of the above organizations and should have sufficient global reach. To ensure a successful outcome, this would require active support from a number of key organizations (e.g. MDBs, energy agencies) in providing data on key targets and indicators (e.g. as proposed in SLoCaT Partnership inputs to the UNSC process). These data inputs would then be incorporated into a joint tracking framework and a regular series of associated reports to ensure transparency and accountability, and to drive success of current and forthcoming commitments.

In summary, the long-term success of both individual transport targets – as well any voluntary transport commitment scheme contributing towards such targets – depends on a robust monitoring framework built upon appropriate indicators that is supported by sufficient financial and human resources.

### Section V.

### **Conclusions and Recommendations**

In sum, a comprehensive review of 2012-2015 voluntary transport commitments has revealed the following conclusions and recommendations:

- Transport commitments are a useful demonstration of concerted and widening efforts from a broad coalition of global actors and initiatives.
  - In the period from 2012 to 2015, the number of transport commitments has increased from an original 17 commitments at Rio+20 to more than 34 commitments today<sup>89</sup>, which cover a growing range of topics including rail transport, public transport, cycling, road safety, energy efficiency, electric mobility, airports, inland shipping, and ITS, among others.
  - In the period from 2012 to 2015, the number of organizations involved in voluntary transport commitments has increased from roughly 30 to more than 100, including transport sector organizations as well as MDBs, NGOs, and city governments, among others.
- Transport commitments, if implemented successfully will be a major contribution to a number of direct and indirect transport targets linked to seven SDGs.
  - Both sustainable development and climate change oriented commitments contribute to the SDG transport targets.
  - There is an emphasis on urban transport, passenger transport and climate change mitigation in the focus of transport commitments with a smaller number of commitments focusing on freight transport, road safety, energy efficiency and climate change adaptation. The least substantive focus of existing transport commitments is on rural issues (e.g. rural transport, food security, food losses).
- Transport commitments have the potential to accelerate much-needed actions on climate change and sustainable development by non-state actors, which can promote change at national and global levels.
  - The initial round of 2012-2013 commitments set the transport commitment process in motion, with a set of bold and diverse commitments.
  - The Secretary General's Climate Summit commitments and emerging LPAA commitments have expanded and refined the scope of the original 23 commitments.
  - Ongoing and emerging city- and business-focused transport commitments provide a replicable model for quickly expanding bottom-up transport commitments.
- Transport commitments have yielded measurable impacts in a short period of time, but there is potential to increase ambition and maximize effectiveness of initial commitments
  - The estimated global impact of transport commitments is substantial, with at least one out two transport trips to be made in 2025 likely to be affected by the collective commitments.<sup>90</sup>
  - The commitments are a key part of a shift to low-carbon mobility, which can result in cumulative savings of US\$70 trillion by 2050 due to avoided investments in fuels, vehicles, and especially car based infrastructure.<sup>91</sup>
  - In addition to implemented projects, transport commitments have led to examples of policy change to drive further action on sustainable low carbon transport.
- Transport commitments and measures are increasingly being adopted by local and national governments, which are emerging through city-based action and growing national attention to transport in INDCs.
  - City-based commitments can help drive critical local actions to meet sustainable development and climate change targets and expand networks of cooperation. These commitments have the potential to drive key policies to accelerate implementation of sustainable transport at national scales.
  - Examples of transport 'early-adopters' in INDCs include bold commitments from developing country parties, including Benin, Ivory Coast, Jordan, and Morocco. INDCs require detailed implementation plans in addition to tangible reduction targets for maximum effectiveness.
  - Sustainable development and climate change related transport commitments can act as partners to cities and countries that are willing to take on transport related actions.

<sup>89</sup> This number does not include city- and country-level commitments through INDCs.

Joint Action Statement for the Transport Action Area. 2014. http://bit.ly/1KRpObV

<sup>91</sup> Joint Action Statement for the Transport Action Area. 2014. http://bit.ly/1KRpObV

- Transport commitments could benefit from a strengthened monitoring framework and a clear set of policy linkages, which could increase their potential for long-term impact and follow-through.
  - The emerging IAEG-SDGs monitoring framework proposes a number of transport-relevant indicators, but additional revisions are needed to fill existing gaps in transport coverage (e.g. non-motorized transport, rural transport).
  - Existing monitoring approaches (e.g. Logistics Performance Index, WHO Road Safety Report, SE4AII) provide useful
    possible elements of a transport-relevant tracking framework, but transport sector-wide implementation would
    require a holistic planning approach and significant financial and human resources.
  - A number of voluntary transport commitments are helping to develop methodologies and expand data collection efforts to contribute toward the tracking of voluntary commitments as a whole.

These conclusions are intended to help to guide further development of the transport commitment framework to accelerate action on sustainable transport, in conjunction with implementation of the post-2015 development agenda and global transport emissions mitigation strategies.

### **Annex I: Implementation Approach of Transport Commitments**

Name of Commitment	Strengthening Partnerships	Policy Implementation and Standards	Capacity Building	Development of Tool Kits	Data Collection and Monitoring	Financial Support	Pilot or Full- Scale Project Implementation
Original Rio+20 Commitments (2012)							
Building Institutional and Political Capacity for Urban Sustainable Mobility							
CAPSUT-"Capacity Building on Sustainable Urban Transport"							
Commitment to Sustainable Transport							
Doubling the market share of public transport worldwide by 2025							
Creating a world free of high-risk roads							
Pas-Port To Mobility							
Principles for Bus Rapid Transit Systems							
Principles for Transport in Urban Life							
Promote and support the reduction of Particulate Matter/Black Carbon emissions from transport through the introduction of cleaner, low sulphur fuels and cleaner vehicles through adoption of vehicle emissions standards							
Promoting Environmentally Sustainable Transport (EST)							
Promoting Green Freight in Europe and Asia							
Protecting children from traffic injuries and improving their urban environment							
Results-Based National Urban Transport Policy and Finance							
Scaling Up Sustainable Transport Solutions Worldwide							
Promote the development and implementation of fuel economy standards and policies across the globe							
UIC Declaration on Sustainable Mobility							

Post-Rio+20 Commitments (2013)							
Climate Change Adaptation for International Transport							
Networks (CCAITN)							
Evaluating Impacts of Sustainable Transport Voluntary							
Commitments							
For Future Inland Transport Systems (ForFITS)							
Tracking Environmentally Sustainable Transport (TEST)							
UNECE Road Safety Activities							
Urban Mobility Observatory (UMO)							
Climate Summit Commitments (2014)							
Low-Carbon Sustainable Rail Transport Challenge							
Declaration on Climate - UITP							
Urban Electric Mobility Vehicles Initiative (UEMI)							
Vehicle Fuel Efficiency Accelerator							
Global Green Freight Action Plan							
Emerging Initiatives (2015)							
MobiliseYourCity							
C40 Cities Clean Bus Declaration							
Modal shift to cycling worldwide and doubling cycling							
in Europe by 2020.							
Airport Carbon Accreditation							
International Zero-Emission Vehicle Alliance							
Navigating a changing climate							
ITS for the Climate							
Total Number of Commitments	21	26	19	10	12	2	14

## Annex II: Linking Transport Commitments to SDGs

	ansport Commitments and SDG Targets						Develor (SDGs)	oment G	oals	Sustainable Development Goals (SDGs)								
Tra	sport Co	mmitmen	ts and SDG Targets		3	7	9	11	12	2			11	12	13	13		
						Direct T	ransport	t Targets			ا	Indirect Transport Targets						
#	Start	End	Commitment Name	Commitment Organizations	3.6	7.3	9.1	11.2	12.c	2.3	3.9	6.1	11.6	12.3	13.1	13.2		
RIC	+ 20 C	омміті	VIENTS															
1	2012	2023	Building Institutional and Political Capacity for Urban Sustainable Mobility	UN-HABITAT in partnership with City Governments, ICLEI, ITDP, GIZ, UITP, CODATU and Regional Development Banks														
2	2012	2023	CAPSUT-"Capacity Building on Sustainable Urban Transport"	GIZ														
3	2012	2022	Commitment to Sustainable Transport	AfDB, ADB, CAF, EBRD, EIB, IDB, IsDB, WB														
4	2012	2025	Doubling the market share of public transport worldwide by 2025	UITP and participating members														
5	2012	2030	Creating a world free of high-risk roads	iRAP														
6	2012	2023	Pas-Port To Mobility	Velo Mondial														
7	2012	2020	Principles for Bus Rapid Transit Systems	ITDP, GIZ, GSD+, Logit Engineering														
8	2012	2023	Principles for Transport in Urban Life	ITDP, Nelson/ Nygaard, Gehl Architects														
9	2012	2022	Promote and support the reduction of Particulate Matter/Black Carbon emissions from transport through the introduction of cleaner, low sulphur fuels and cleaner vehicles through adoption of vehicle emissions standards	UNEP on behalf of PCFV														
10	2012	2020	Promoting Environmentally Sustainable Transport (EST)	UNCRD and partners														
11	2012	2023	Promoting Green Freight in Europe and Asia	Secretariat for Green Freight Europe: ESC, EVO Dutch Shippers' Council, CAA-Asia, Green Transformation Lab														
12	2012	2023	Protecting children from traffic injuries and improving their urban environment	Amend; Asia Injury Prevention Foundation; Costa Rica Automobile Club; Dutch Cycling Embassy; EMBARQ; FIA Foundation; iRAP; Make Roads Safe; Road Safety Fund; Safe Kids Worldwide; Share the Road: Increase investment in walking and cycling Initiative; UNEP; Zenani Mandela Campaign														

					Sus	tainable	Develo (SDGs)	pment G	oals		Sustair	nable De	velopme	nt Goals	(SDGs)		
Tran	sport Co	mmitment	s and SDG Targets		3	7	9	11	12	2			11	12	13	13	
						Direct T	ranspor	t Targets			Indirect Transport Targ				ets		
#	Start	End	Commitment Name	Commitment Organizations	3.6	7.3	9.1	11.2	12.c	2.3	3.9	6.1	11.6	12.3	13.1	13.2	
RIO	+ 20 C	омміти	MENTS														
13	2012	2023	Results-Based National Urban Transport Policy and Finance	ITDP, Carnegie Endowment for International Peace													
14	2012	2016	Scaling Up Sustainable Transport Solutions Worldwide	EMBARQ													
15	2012	2030	Promote the development and implementation of fuel economy standards and policies across the globe	UNEP, FIA Foundation, IEA, ITF, ICCT													
16	2012	2013	UIC Declaration on Sustainable Mobility	UIC and participating members													
POS	T-RIO \	VOLUNTA	ARY COMMITMENTS														
17	2013	2023 (poss ibly earlie r)	Climate Change Adaptation for International Transport Networks (CCAITN)	UNECE that services the Inland Transport Committee													
18	2013	2016	Evaluating Impacts of Sustainable Transport Voluntary Commitments	ITDP, ITS-Davis, IDB, IEA, ICCT and other partners													
19	2013	2023	For Future Inland Transport Systems (ForFITS)	UNECE													
20	2013	2023	Tracking Environmentally Sustainable Transport (TEST)	IEA													
21	2013	2023	UNECE Road Safety Activities	UNECE													
22	2013	2023	Urban Mobility Observatory (UMO)	CAF													
SG	CLIMAT	E SUMM	IIT LAND TRANSPORT COMMITMENTS	5				_									
23	2014	2050	Low-Carbon Sustainable Rail Transport Challenge	UIC and participating members													
24	2014	2025	Declaration on Climate Leadership	UITP and participating members													
25	2014	2030	Urban Electric Mobility Vehicles Initiative (UEMI)	UN-Habitat and partners													
26	2014	2050	Vehicle Fuel Efficiency Accelerator	Global Fuel Economy Initiative and FIA Foundation (hosts secretariat)													
27	2014	2030	Global Green Freight Action Plan	Smart Freight Centre and partners													

	ransport Commitments and SDG Targets			Sus	tainable	Develop (SDGs)	oment Go	oals	Sustainable Development Goals (SDGs)								
Trai				3	7	9	11	12	2			11	12	13	13		
						Direct T	ransport	Targets				ndirect 1	Transpor	t Targets			
#	Start	End	Commitment Name	Commitment Organizations	3.6	7.3	9.1	11.2	12.c	2.3	3.9	6.1	11.6	12.3	13.1	13.2	
EN	EMERGING COMMITMENTS ON SUSTAINABLE LOW CARBON TRANSPORT																
28	2015	2050	MobiliseYourCity	CODATU, CEREMA, AFD, GIZ													
29	2015	2020	C40 Cities Clean Bus Declaration of Intent	Cities of the Low Emission Vehicles Network													
30	2015	2020	Cycling delivers!	WCA and ECF													
31	2009	N/A	Airport Carbon Accreditation	ACI Europe, ACI Asia-Pacific, ACI North America, ACI													
				Africa, and ACI - LAC													
32	N/A	N/A	International Zero-Emission Vehicle Alliance	The Netherlands, California, Québec													
33	N/A	N/A	Navigating a changing climate	PIANC's Think Climate coalition													
34	N/A	N/A	ITS for the Climate	ATEC-ITS France and TOPOS Aquitaine													

(\*Abbreviation of organizations: AfDB - African Development Bank, ADB - Asian Development Bank, ATEC - Association pour le développement des Transports, de l'Environnement, et de la Circulation, CAA - Clean Air Asia, CAF - Development Bank of Latin America, CEPA - California Environmental Protection Agency, CODATU - Cooperation for urban mobility in the developing world, EBRD - European Bank for Reconstruction and Development, ECF - European Cyclists' Foundation. EIB - European Investment Bank, EMBARQ - "Sustainable Urban Mobility" by World Resource Institute, ESC - European Shippers' Council, EuDA - European Dredging Association, GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit, IAPH - International Association of Ports and Harbors, ICCT - International Council on Clean Transportation, ICLEI - Local Governments for Sustainability, IDB - Inter-American Development Bank, IEA - International Energy Agency, IHMA - International Harbour Masters' Association, IMPA - International Road Assessment Programme, IsDB - Islamic Development Bank, ITDP - Institute for Transportation and Development Policy, ITF - International Transport Forum, ITS - Intelligent Transportation System, PCFV - Partnership for Clean Fuels and Vehicles, PIANC - World Association for Waterborne Transport Infrastructure, Rio+20 - United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil in June 2012, 20 years after 1992 Earth Summit in Rio, ITS-Davis - Institute of Transportation Studies - UC Davis, UIC - International Union of Railways, UITP - International Association of Public Transport, UNCRD - United Nations Centre for Regional Development, UNECE - United Nations Economic Commission for Europe, UNEP - United Nations Environment Programme, WB - World Bank, WCA - World Cycling Alliance)

### **Annex III: Analysis of Transport Interventions in INDCs**

	Transport Interventions of INDCs (Transport Subsector)						Transport Interventions in INDCs (Thematic Area)					
Country	Passenger Transport	Freight Transport	Urban Transport	Railways	Waterways/ Shipping	Aviation	Energy Efficiency	Renewable Energy	Fuel Subsidy	Land-use/ Urban form	Public Transport	Walking/ Cycling
Jordan												
Algeria												
Australia												
Benin												
Canada												
China												
D.R Congo												
Ethiopia												
Gabon												
Ivory Coast												
Japan												
Macedonia												
Marshall Islands												
Monaco												
Morocco												
New Zealand												
Norway												
Republic of Korea				·								
Trinidad and Tobago												
United States												