Global Climate Action Partnership
regional leadership, global change

SLOCAT
Partnership on Sustainable, Low Carbon Transport

Asociación Sustentar

Pathways to 2030: Accelerating Fossil-Free Transport Systems

Wednesday, October 2
Day 1 Raising ambition

Ministério da Ciência, Tecnologia e Inovação
Governo Federal Brasil União e Reconstrução
Asia LEDS Partnership
Plataforma Regional LEDS LAC
African Climate Action Partnership
Partnering on climate action in Africa
United Nations Climate Change
UNDP
NDC Partnership

Master of Ceremonies

UNOPS

Elisabet Viñes Fiestas
Project Manager
Sustainable Transport and Electromobility
Multi-Andean Region, UNOPS

Raising ambition

The Global Climate Action Partnership (GCAP) is a global network accelerating the transition to resilient and inclusive net-zero economies through innovative country-led solutions and collaborative peer learning

Peer learning, technical collaboration, and information exchange

Implementation of ambitious LTS and NDCs

Country and demand-driven focus areas

Regional platforms in Africa, Asia, Latin America, and the Caribbean

Regional Platofrms

African Climate Action Partnership
Partnering on climate action in Africa

- Sustainable Livestock Management
- Rice Methane
- Carbon Markets
- Clean Energy Mini-grids
- Soil Organic Carbon
- Long-Term Strategies

ASIA LEDS PARTNERSHIP

- Transport: EV batteries
- Energy: DER, Storage, Green Hydrogen
- Finance

PLATAFORMA REGIONAL LEDS LAC
ESTRATEGIAS DE DESARROLLO RESILIENTE Y BAJO EN EMISIONES

- Electric Mobility
- Energy: Bioenergy, RE Storage, Renewable Energy for LAC (RELAC)
- MRV & Decarbonization Plans
- Private Sector Engagement
- Methane

Transport High Ambition Group in LAC

Objective

- Generate **collective goals** around the **transition in the transport sector**, with a focus on **electromobility and public transport**.

Benefits

- Resources and tools
- Opportunity to showcase initiatives at regional/global event
- Peer - Learning and project cooperations
- Technical Assistance

Implementing partners:

Asociación Sustentar

NREL National Renewable Energy Laboratory

Leadership Group for Clean Transport in Asia

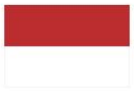
Objectives

- Develop **shared goals and visions for transformation of transport systems** in the region.
- Develop and strengthen pathways to achieve transitions toward **net-zero transport systems** at **national** and **sub-national levels,** and across the region.
- Implement actions consistent with these goals and pathways, through **regional trainings** and **peer collaboration and learning.**


Bangladesh


Bhutan


India


Indonesia


Laos PDR


Philippines


Sri Lanka


Thailand


Vietnam

Implementing partners:

ASIA LEDS PARTNER SHIP

ICLEI Local Governments for Sustainability

NREL

SLOCAT Partnership on Sustainable, Low Carbon Transport

UCDAVIS India ZEV Research Centre Institute of Transportation Studies

Agenda

1. Welcome & Framing
2. State of play for transport in NDCs
3. Sharing stories from contributors
4. Q and A
5. Round table exercise
6. Debrief & plenary feedback
7. Close

State of play for transport in NDCs

Philip Turner
Director of Global Advocacy and Engagement,
SLOCAT

Content

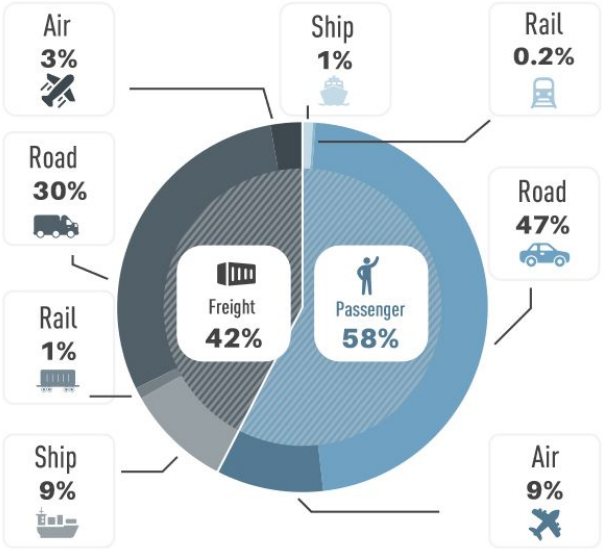
- Overview of transport trends in the last decade
- Gap analysis of transport in NDCs 2.0
- EASI Framework: considerations for the development of NDCs
- Tools and guidance in preparation for NDCs 3.0

Transport contributes a fifth of global CO_2 emissions

- Transport was responsible for **20.7% of global CO_2 emissions in 2022**.
- The sector has a near-complete dependence on **fossil fuels → 96% of the energy demand in transport**.
- There is **increasing energy demand and vehicle fleet**.
- We face ever-increasing passenger vehicle sizes (**SUVs**)

  → 20% more fuel than a medium-sized car.
- Older, **more polluting vehicles remain on the world's roads. → Nearly 66% of used light-duty vehicles were exported to low- and middle-income countries.**

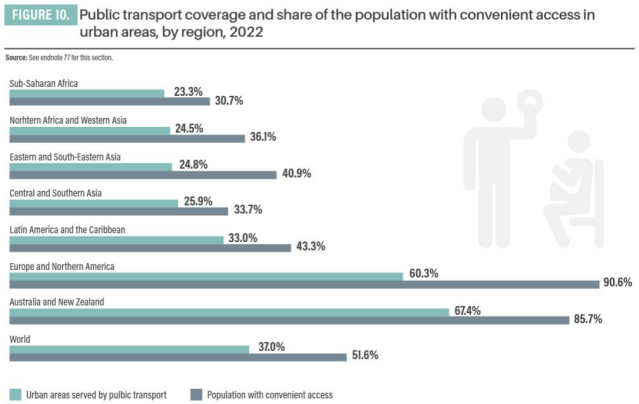
Transport CO_2 emissions by activity and mode, 2019



Source: SLOCAT, "Transport, Climate and Sustainability Global Status Report - 3rd Edition"

Overview of transport trends

Most of the world's population is lacking access to affordable, sustainable transport



Only **32% African urban population** and **38% in Asia** has **convenient access to public transport** compared to the 56% global average.

→ In Africa, 95% of **roads** fail to meet an acceptable level of service.

→ In some African cities 95% of all motorised trips are in **informal transport.**

Transport expenditures often make up a high share of household budgets, placing a burden on low-income users.

→ LAC: Highest share of household spending on transport (17%) as of 2019.

Land traffic contributes 5% of the mortality from $PM_{2.5}$ globally.

→ 32% in North America.

Post-pandemic horizon: **Momentum for proximity planning**, recognition of **health benefits of active mobility, policy responses to walking, and investments in cycle lanes & bike sharing schemes.**.

Traffic crashes are the leading cause of death among 5-29 year-olds worldwide; 93% of them in LMICs.

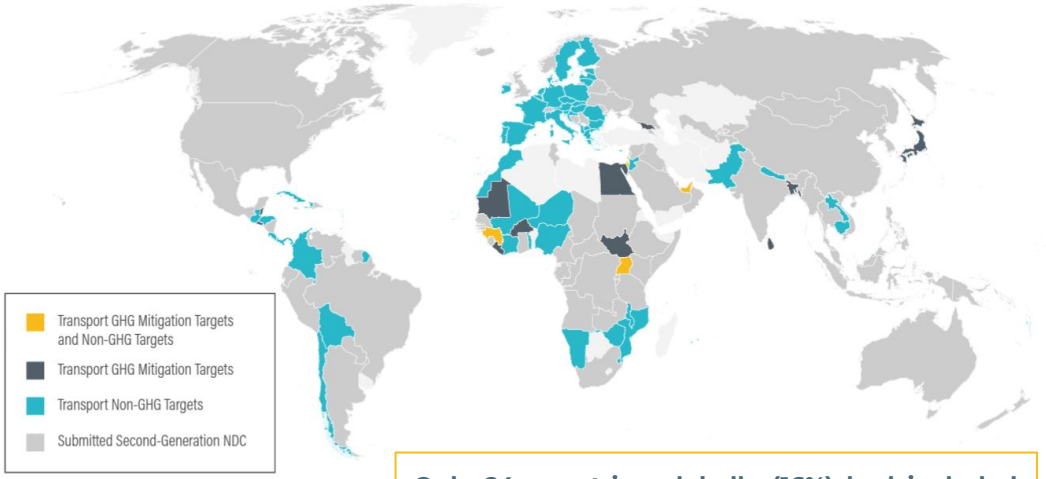
→ **No reduction in traffic deaths for a decade** despite targets.

→ Investment in public transport can reduce crashes by attracting private vehicle users.

Overview of transport trends

Without more ambitious policies towards structural and systemic transformation, transport emissions could grow as much as 50% by 2050.

Transport targets, by type, in second-generation NDCs



Only 24 countries globally (16%) had included transport emissions targets in **Nationally Determined Contributions** (NDCs)

Few Voluntary National Reviews of the Sustainable Development Goals present long-term targets or concrete policy measures

- Current **NDCs will still contribute to average global temperature rise of 2.8°C by 2100.**
- There remains a lack of **comprehensive and balanced policy action** with a **disproportionate focus on "Improve" measures.**
- As of 2022, **just over 3% of cities worldwide had a low-emission zone** in place or planned; at least **10% had a sustainable urban mobility plan** (SUMP).
- The **electrification agenda focuses mainly on e-cars.**

Gap analysis of NDCs 2.0

Check out the tracker

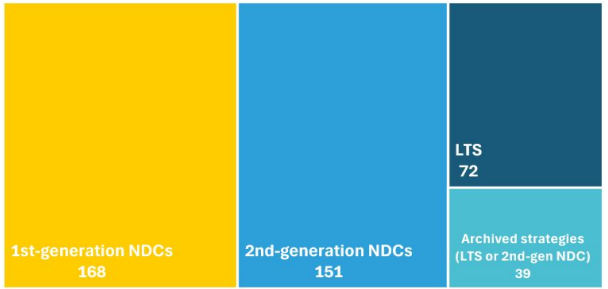
GIZ-SLOCAT NDC Transport Tracker - Ambition, targets and policies in NDCs and Long-Term Strategies

- Launched in May 2021
  with continuous updates and improvements

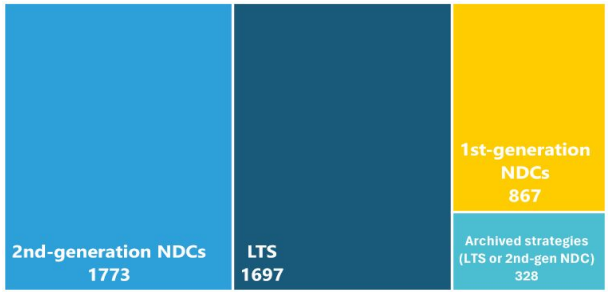
- As of September 2023, tracker covers around **430 climate strategies**
  - 72 LTS
  - 168 first-generation NDCs
  - 151 second-generation NDCs
  - 39 archived climate strategies (covering previous versions of LTS or NDCs)

- Contains over **4,600 items**

Number of covered documents



Number of covered items



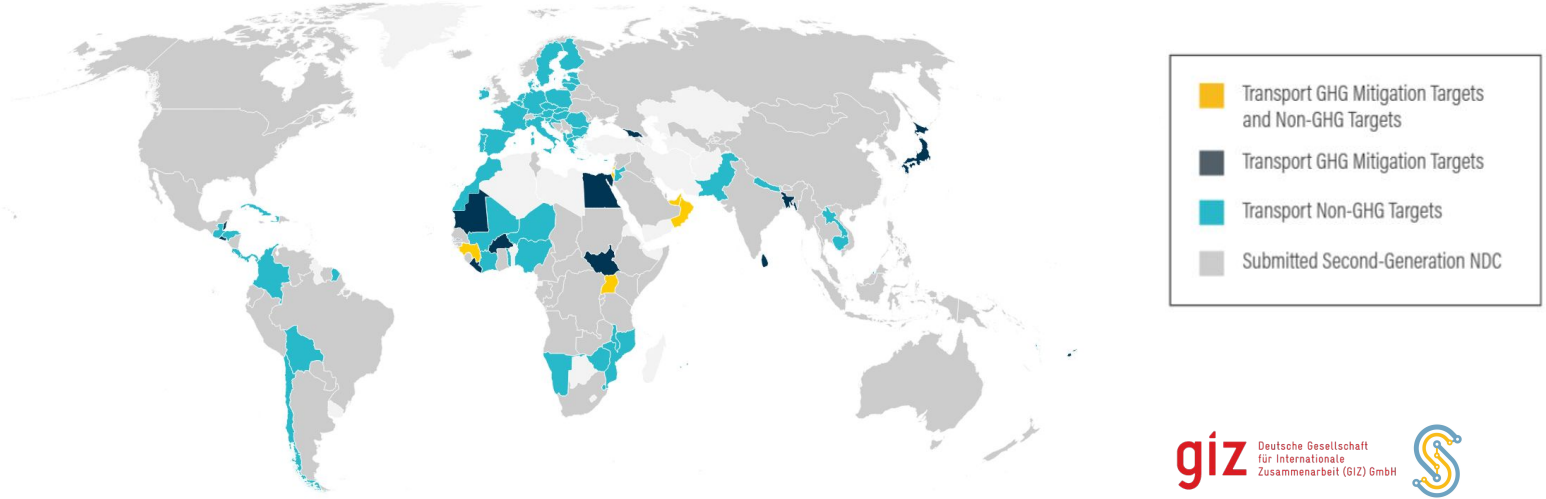
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Gap analysis of NDCs 2.0

Too few NDCs include transport GHG mitigation targets

Targets

- **42% of second-generation NDCs** contain transport targets (either transport GHG mitigation targets and/or other quantitative targets for transport).
- However, **only 24 second-generation NDCs have a transport GHG mitigation target**, representing 16% of all second-generation NDCs.



giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Gap analysis of NDCs 2.0

Intermediate targets and actions in NDCs, long-term activities in LTS

Scope and timeframes

NDCs

- 151 submissions (150 countries and the EU) covering 96% of transport CO_2 emissions (excl. International aviation and shipping)
- Current NDCs focus until 2030, NDC 3.0 will target 2035

There are on average

8.2

transport actions per second-generation NDC.

LTS

- 71 submissions (covering 78 countries and the European Union)
- 81% of transport CO_2 emissions are covered by LTS
- LTS outline activities until 2050

There are on average

18.1

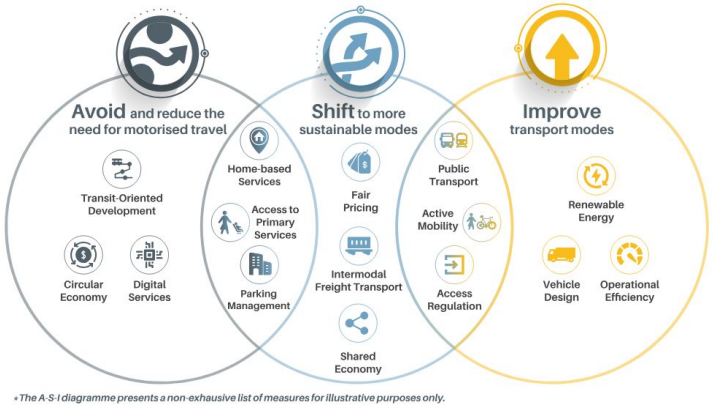
transport actions per LTS.

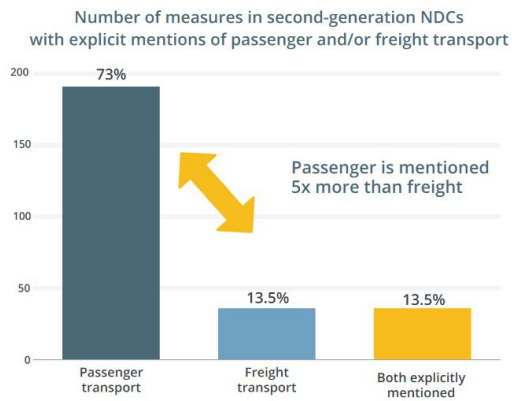
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Gap analysis of NDCs 2.0

Full potential of inclusion of Avoid and Shift actions has not yet been reached. Improve actions dominate in the LTS and second-generation NDCs.

- There are nearly **twice as many transport mitigation actions** featured in each second-generation NDC compared to first-generation NDCs.
- **Electric mobility** is the most common mitigation action in second-generation NDCs.
- **Imbalance of Avoid-Shift-Improve** (12% Avoid, 28% Shift, 60% Improve).
- Second-generation NDCs focus **more on passenger than freight transport (split of 5:1)**, a decline compared to the first generation of NDCs (4:1).





Source: SLOCAT, Refocusing ASI, https://slocat.net/asi/

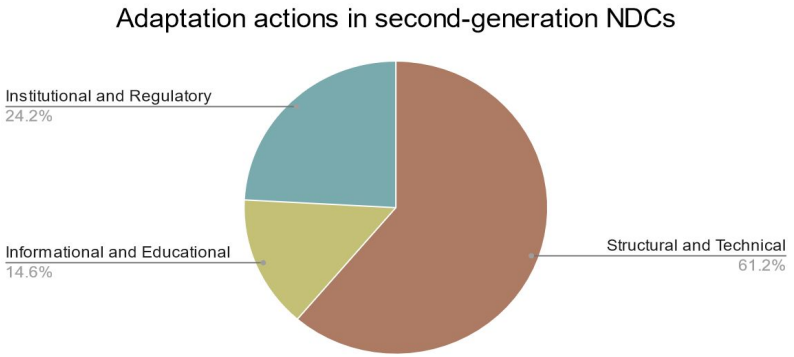
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Gap analysis of NDCs 2.0

Transport adaptation targets and actions are still limited

Adaptation and Resilience

- The adaptation content is very **general and superficial**, majority is focusing on road infrastructure resilience.
- Over 60% of actions focus on **structural and technical approaches**.
- **Only 8 NDCs have transport adaptation targets**, covering activities around climate-proof infrastructure and support for more robust and resilient transport systems.



Call to double the share of energy efficient and fossil-free forms of land transport by 2030

Now is the time to move from pledges to 2030 targets and measures in the next generation of NDCs that can pragmatically put us on a 1.5°C pathway.

Action for ambition
A race to the top

NDCs analysis and multistakeholder dialogue towards the target of doubling the share of energy efficient and fossil-free forms of land transport for people and goods by 2030

Action for finance
Transport in climate finance and the Loss & Damage Fund

Facts, figures and guidance about investment needs and opportunities for transport sustainability, decarbonisation, adaptation and resilience in low- and middle-income countries

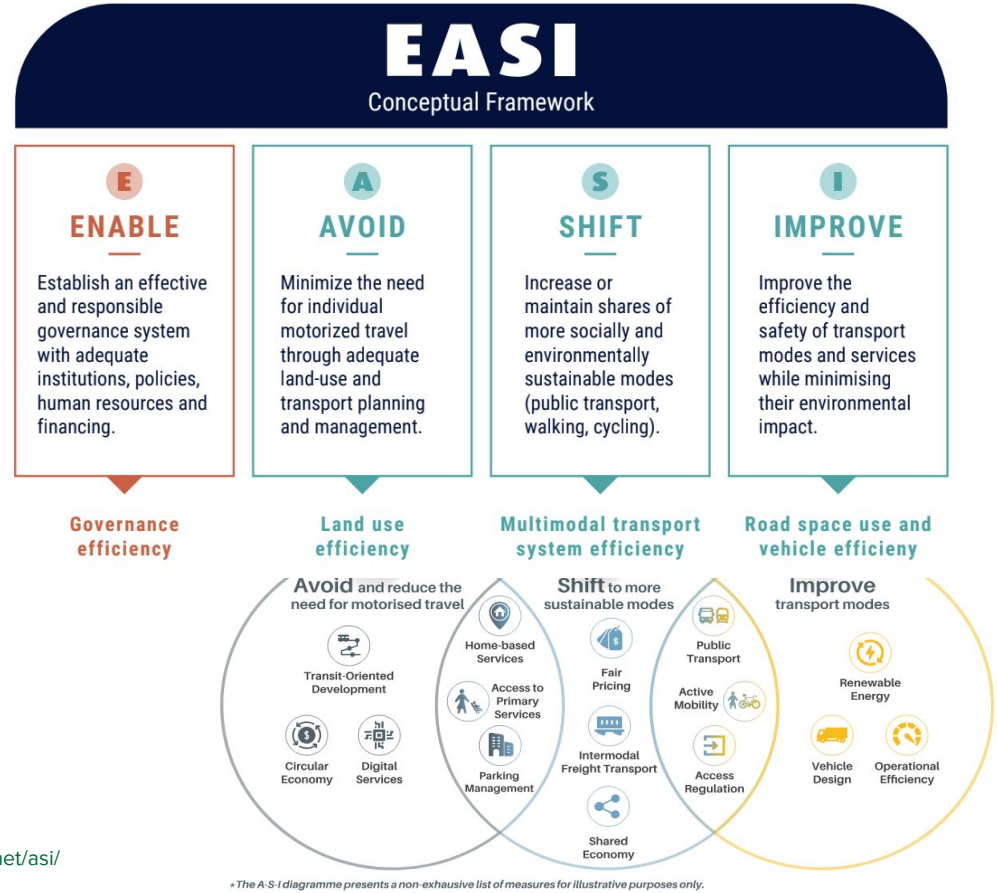
Action for capacity
2030 transport targets and measures

Compendium of target areas and measures that countries can include in their next NDCs, including illustrative practices

Check out the webpage and the 60+ multi-stakeholder signatories, including Colombia and Chile:

https://slocat.net/call-to-action-on-fossil-fuel-free-land-transport/

EASI Framework: considerations for the development of NDCs



Source: SLOCAT, Refocusing ASI, https://slocat.net/asi/

Tools and guidance for the preparation of NDCs 3.0

Tool/Guidelines	Organisation	Description	Focus
About transport decarbonisation			
Transport Chapter in the Sixth Assessment Report	**IPCC**	Science-base for transport decarbonisation; current situation and mitigation potential for transport modes and activity on the global and regional level are shown.	All modes covered
Net Zero by 2050	**IEA**	A global roadmap to achieve net-zero emissions by 2050 with key milestones that countries have to set in place for all sectors. There is detailed guidance on transport available.	All modes covered
Strategy on Reducing Greenhouse Gas Emissions from Inland Transport	**UNECE**	Strategy to show a medium- and long-term course towards carbon neutrality by 2050. Specific strategic objectives, an implementation approach and measuring framework are featured.	Land transport
Vision for Transport Transformations	**SLOCAT**	Ten key transformations to put transport on track to deliver on climate and sustainability goals, complemented with overarching approaches and catalytic measures.	All modes covered
Call to double the share of energy efficient and fossil-free forms of land transport by 2030	**SLOCAT, REN21, IDDRI, ITDP, UIC, UITP, WRI**	Nine action areas that represent universal enablers to reduce energy consumption and fossil fuel dependency from land transport. Guidelines for the next NDCs are forthcoming.	Land transport
About NDCs in general			
Enhancing Ambition and Transparency in the Next Round of NDCs	**GIZ - Changing Transport**	Six action recommendations for policymakers to align transport with the Paris Agreement and the Sustainable Development Agenda, highlighting best practices from second-generation NDCs	Domestic transport
The CAT guide to a good 2035 climate target	**Climate Action Tracker**	Guidance document for next NDCs, outlining how to strengthen 2030 targets and how to design 2035 targets, sectoral targets for transport are featured.	All modes covered
NDC 3.0 Navigator	**NDC Partnership**	Tool to support the development of next NDCs, collection of guiding material for transport is featured.	All modes covered
Next-generation Climate Targets: A 5-Point Plan for NDCs	**WRI**	Suggestion on how to approach next NDCs, with a few remarks to transport	No specific guidance on any mode
Local Action for Global Goals: An Opportunity for Enhancing Nationally Determined Contributions	**UN-HABITAT**	Review of urban content in current NDCs; no specific content on transport but many pointers to improve multilevel climate action	No specific guidance on any mode

Tools and guidance for the preparation of NDCs 3.0

Tool/Guidelines	Organisation	Description	Focus
Templates for NDCs from a modal lens			
Informal transport NDC template (forthcoming)	**Global Network for Popular Transportation**	NDC template on how to reflect informal transport services in next NDCs	Informal transport
Active Travel NDC Template	**PATH - Partnership for Active Travel and Health**	Guidance template for ambitious and impactful content on walking and cycling in next NDCs; featuring vision, goals; objectives, measures and outcomes;	Walking and cycling
Rail in Nationally Determined Contributions: Analysis and recommendations	**UIC**	Review of rail transport in current NDCs and recommendations (more detailed templates to follow soon)	Rail
Public Transport National Determined Contributions Template	**UITP**	Guidance to enhance public transport activities in next NDCs; outlining vision, goals, actions and monitoring and reporting; best practices of current NDCs are highlighted	Public transport

Tools and guidance for the preparation of NDCs 3.0

Check out recent SLOCAT releases

- **NDCs Library** - Guidelines, templates, tools and resources to support the next NDCs.
- **Freight and logistics in the NDCs,** with Kühne Climate Center.
- **Just transition in the NDCs**, with the International Federation of Transport Workers.

Stay tuned for forthcoming SLOCAT resources

- **Transport Decarbonisation Index:** to assist Low and Middle-Income Countries in Africa and South Asia in reducing greenhouse gas emissions in surface transport by providing a diagnostic toolkit, with UK's HVT, UEMI, Lew Fulton, Pierpaolo Cazzola, Jacob Teter.
- Compendium of **policy interventions on freight transport and logistics**, with Kühne Climate Center ICYM: Manifesto for intermodal, low-carbon, efficient and resilient freight transport and logistics.
- **Transport in the NDCs of Asia-Pacific countries,** with UNESCAP, UK's HVT and ADB.

Our open source database

- **NDC Transport Tracker** by GIZ and SLOCAT.
- **Climate Strategies for Transport: A SLOCAT Analysis of NDCs and Long-Term Strategies.**
- Regional snapshots **Africa, Asia, LAC and MENA.**

📩 Nikola Medimorec
nikola.medimorec@slocatpartnership.org for more info

Sharing stories

Lisset Ramirez Ordoñez
Supervisor of Electromobility
Executive Directorate of Planning Evaluation and Information Technologies at Metrobus, Mexico City

Soumya Chaturvedula
Deputy Director,

Asia LEDS Partnership/ICLEI South Asia

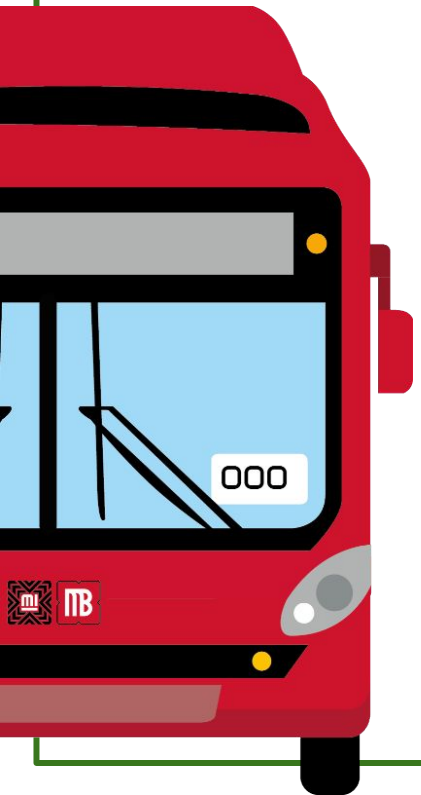
Lisset Ramirez Ordoñez

Supervisor of Electromobility - Executive Directorate of Planning Evaluation and Information Technologies at Metrobus, Mexico City

Global Climate Action Partnership
regional leadership, global change

SLOCAT
Partnership on Sustainable, Low Carbon Transport

ASOCIACIÓN Sustentar



Electrification plan for the Metrobús system

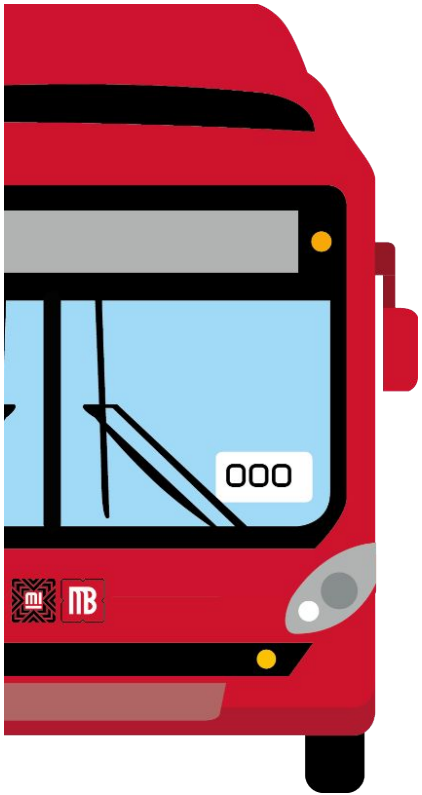
CONTENT

Context

- 7 Lines of the System (164 km)
- 251 stations
- 25 Terminals
- 850 buses
- 250 km average/bus
- 16 bus depots
- 1.9 million daily passengers
- 17 concessionaires

OUR CONTRIBUTIONS

New model, new rules, new bus



Electrification in Metrobús begins

Firm steps → Replicable model for the city.

NUESTROS APORTES

Un nuevo modelo, nuevos reglas, nuevo autobús

- First Model
  - Separation of ownership. → **Lease & Operation.**

Challenge → **$/km Diésel OPEX** = **$/km electrics CAPEX + OPEX**

Find anchorage → We generate new models with **Development Banking**.

- Second model.
  - Simple loan. → 15 years.

TARIFF EXEMPTION

↓

LESS TAXES FOR BUSES

NUESTROS APORTES

Un nuevo modelo, **nuevos reglas**, nuevo autobús

Legal Challenges → **Good foundations** for proper operation.

- Operating Rules → **Bonuses and penalties**
  - Operational evaluation and energy & operational performance.
- Modification to the concession.
  - Generate conditions so that investors **have certainty.**
- A robust trust with new tools.
- The Metrobús Trust → The **neural system** of the model.

NUESTROS APORTES

Un nuevo modelo, nuevos reglas, **nuevo autobús**

An electric **articulated bus custom-made**.

- Robust **technical annexes.**
  - Design and **energy capacity.**
- We developed a catalogue.
  - VOLVO.
  - YUTONG.
  - BYD
  - SUNWIN
  - ZHONGTONG.

More options, better conditions. → ***The model could be replicated.***

Pathway to electromobility

2020

- Fleet replacement (10 years)
- Tariff
- 1st unit for testing on Line 3
- 1 charger in depot

2021

- 9 buses (18 m)
- 7 chargers

2022

- 50 buses 18 m
- 25 chargers
- Unit for testing on Line 4

2023

- Start of operations for 60 electric buses on Line 3
- 32 chargers
- 19 units (15 m) for Line 4

2024

- Start of operations for 55 electric buses

28 chargers

System electrification

Features of Line 3 of Metrobús

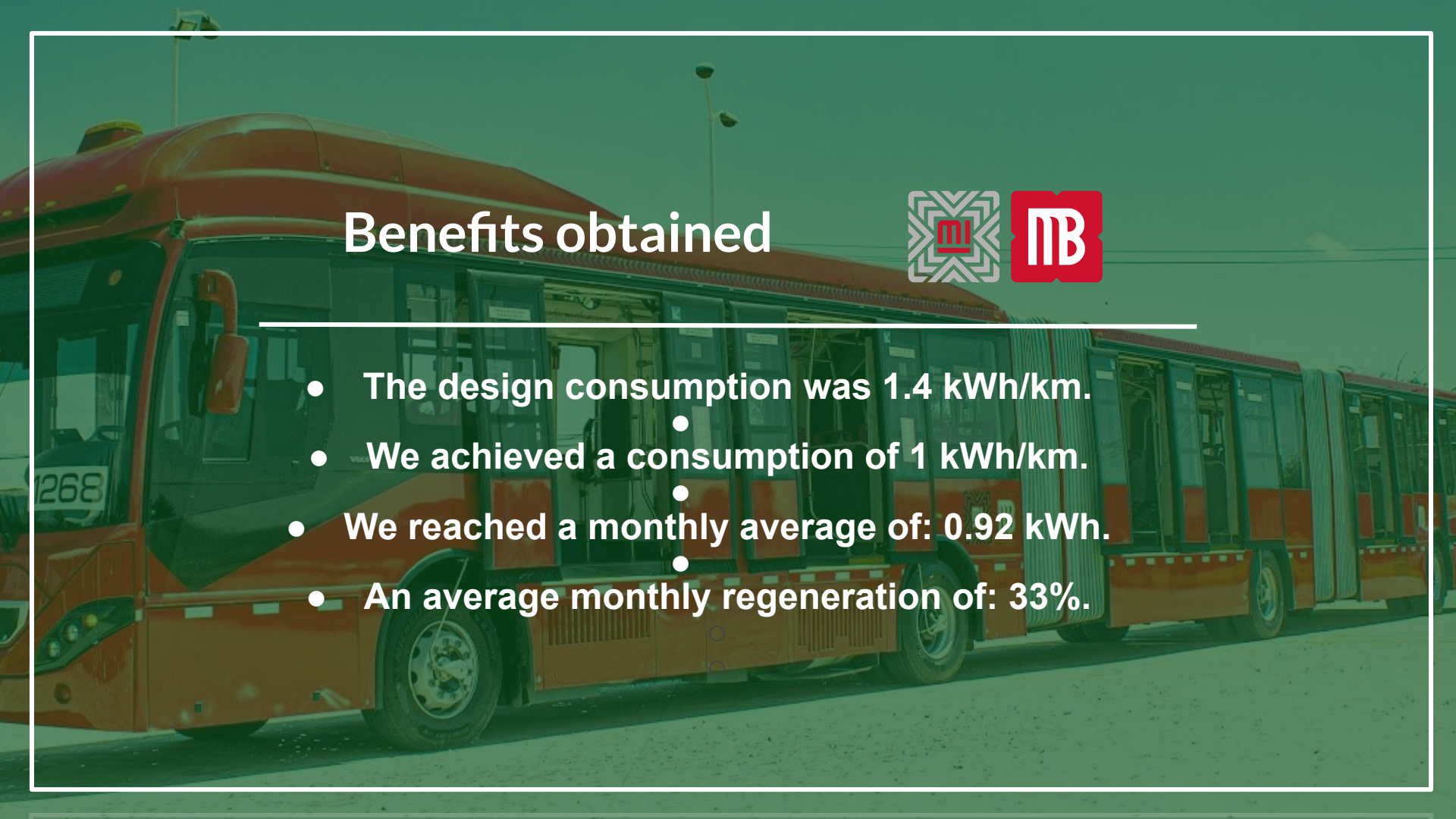
- Inaugurated in 2011 (Tenayuca - Etiopía)
- Extension in 2021 to Santa Cruz Atoyac
- 72 buses
- 20.4 km
- 38 stations
- 4 routes (160 - 330 km)
- 250 km average/bus
- 2 depots (Júpiter and Norte)
- 190,000 passengers on a weekday

Features of Line 4 of Metrobús

- Inaugurated in 2012 (Buenavista - Hidalgo)
- Extension in 2021 (Pantitlán)
- Extension in 2022 (Alameda Oriente)
- 105 buses
- 38 km
- 40 stations
- 6 routes
- 215 km average/bus
- 1 depot (Aviación)
- 120,000 passengers on a weekday

Commissioning of 115 electric buses

	Line 3	Line 4
Number of units in operation	**60** buses of 18 meters	**55** buses of 15 meters
Unit capacity	**160** passengers	**130** passengers
Charging time	**3.5 hours**	**3.0 hours**
Battery capacity LFP battery (lithium-ferrophosphate)	**560 kWh**	**350 kWh**
Autonomy	**330 km**	**246 km**
Type	High entry	Low floor

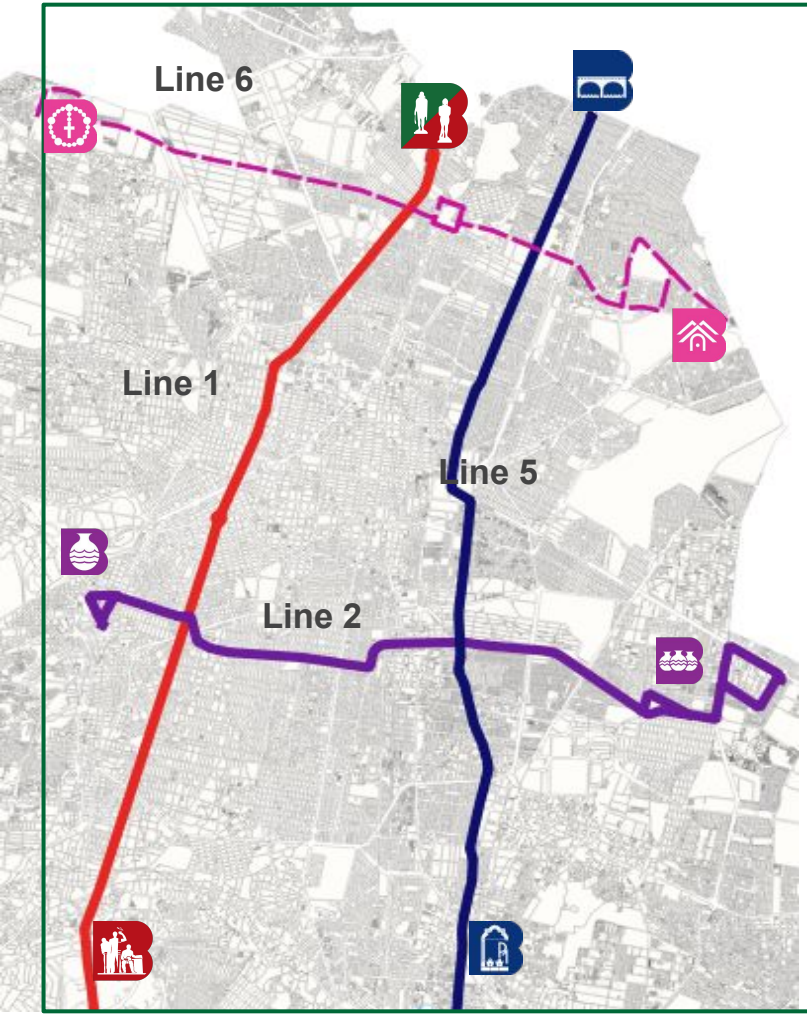


Benefits obtained

- The design consumption was 1.4 kWh/km.
- We achieved a consumption of 1 kWh/km.
- We reached a monthly average of: 0.92 kWh.
- An average monthly regeneration of: 33%.

The next challenge is:

A sustainable electrified system!

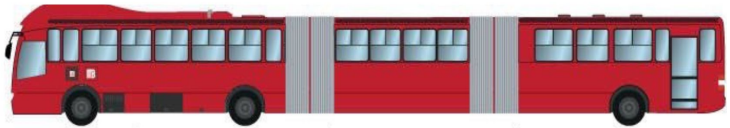


Pilot tests with 2 bi-articulated buses

By 2024, we have the challenge of achieving the first testing fleet of bi-articulated electric buses in Latin America.

SOY ELÉCTRICO

L1, L2, and L5 are lines that need to increase their capacity in the coming years, and L6 will undergo this transformation by 2026.



SHORT-TERM PROJECT

We are considering 250 low-entry buses

New Corridor

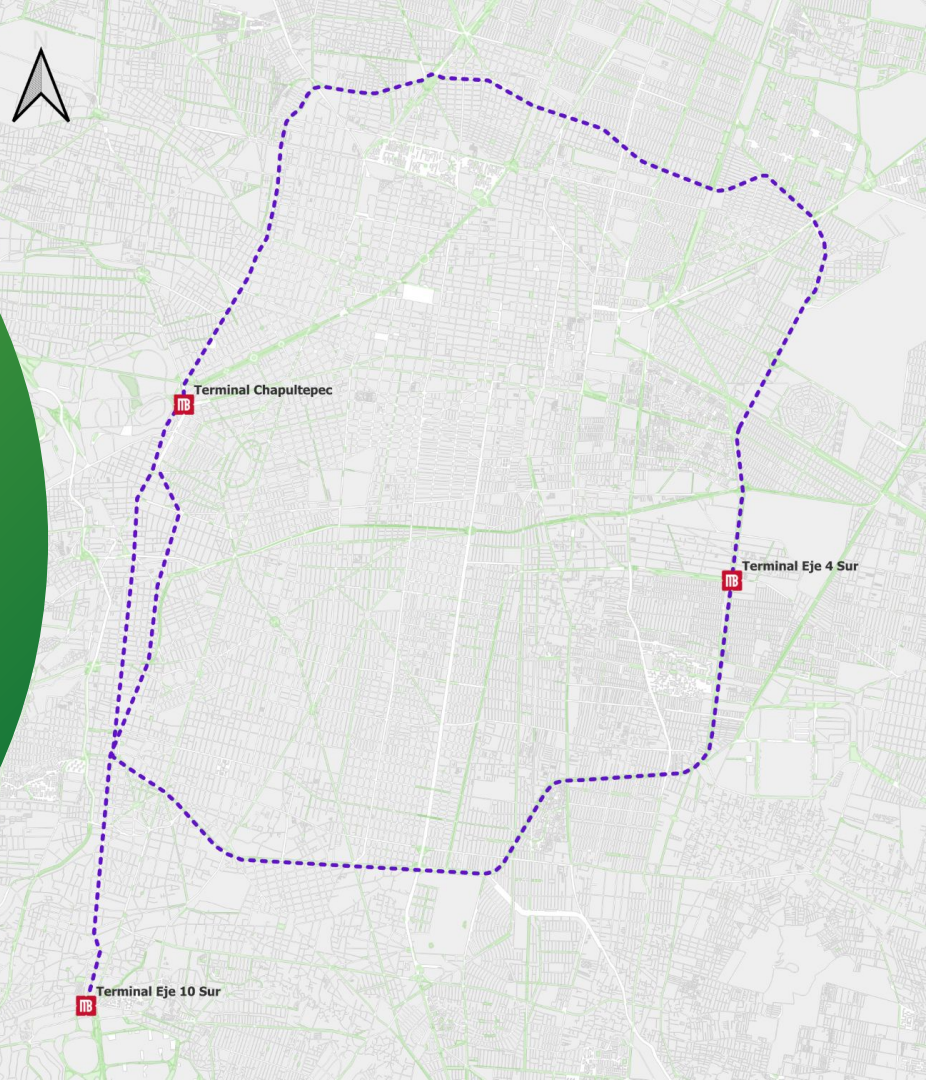
Circuito

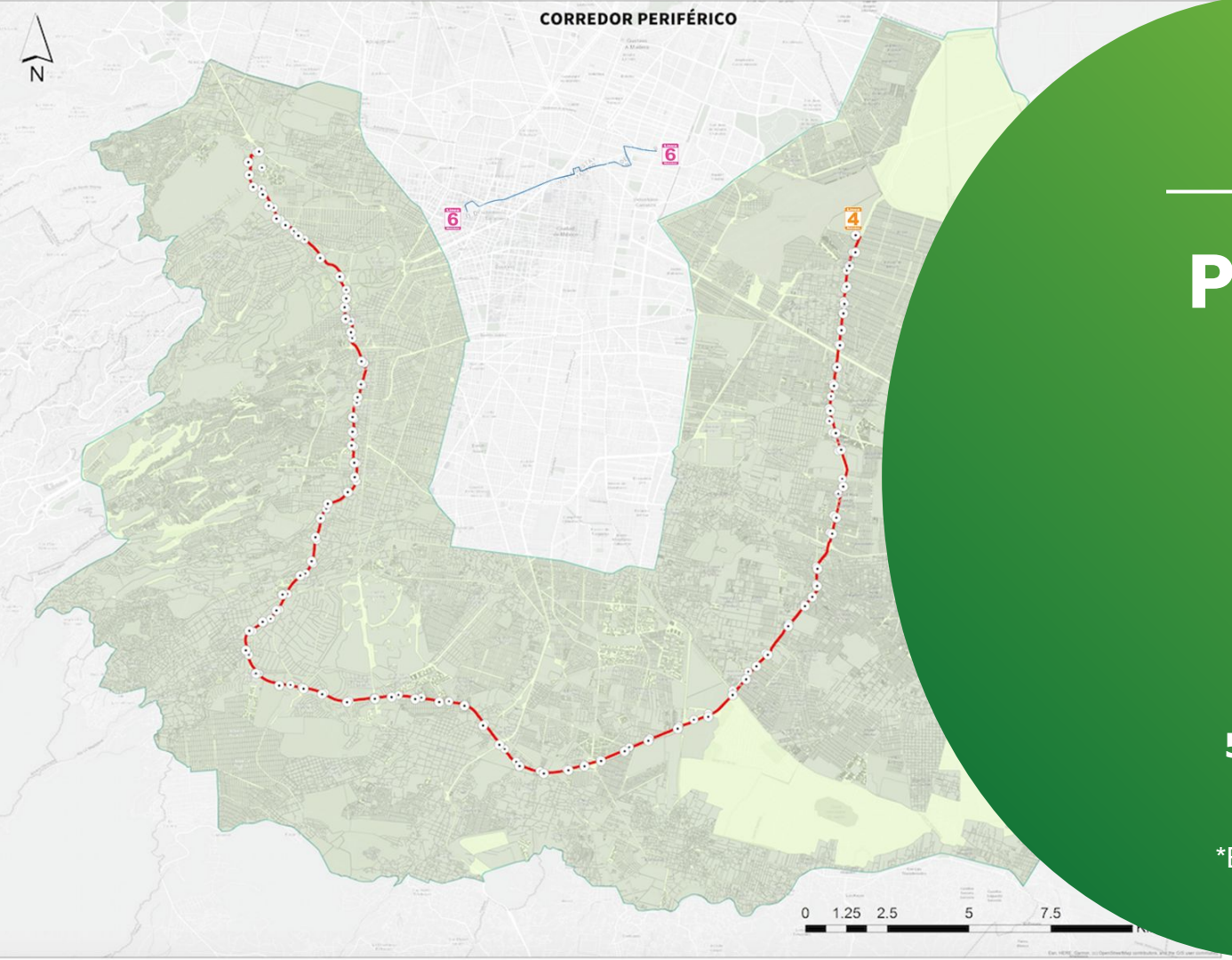
INTERIOR

90 passengers

250 - **300** Battery Capacity

Sliding doors





SHORT-TERM PROJECT

PERIFÉRICO

EAST TO WEST

130 passengers

250 buses

51 km in one way

*Buses will be selected between articulated and 15M buses

Thank you!

Lisset Guadalupe Ramírez Ordoñez

Electromobility Field Engineer at Metrobús

Ms. Soumya Chaturvedula

Deputy Director, Asia LEDS Partnership/ICLEI South Asia

Global Climate Action Partnership

regional leadership, global change

Leadership Group on Clean Transport in Asia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INOVAÇÃO

GOVERNO FEDERAL BRASIL UNIÃO E RECONSTRUÇÃO

ASIA LEDS PARTNER SHIP

PLATAFORMA REGIONAL LEDS LAC ESTRATEGIAS DE DESARROLLO RESILIENTE Y BAJO EN EMISIONES

African Climate Action Partnership Partnering on climate action in Africa

United Nations Climate Change

UNDP

NDC PARTNERSHIP

Context

1. Asia LEDS Partnership
2. Establishing the LGCTA
3. Way Forward

Asia LEDS Partnership

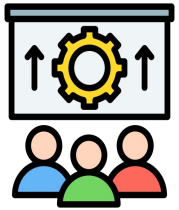
Who we are, what we do

What is Asia LEDS Partnership (ALP)?

The **Asia Low Emission Development Strategies (LEDS) Partnership (ALP)** is a voluntary regional network that promotes and enables low-emission, climate-resilient development across the Asia and Pacific region through peer-to-peer learning, knowledge sharing, and improved coordination and cooperation among governmental and non-governmental partners.

ALP Activities

Communities of Practice (CoPs)



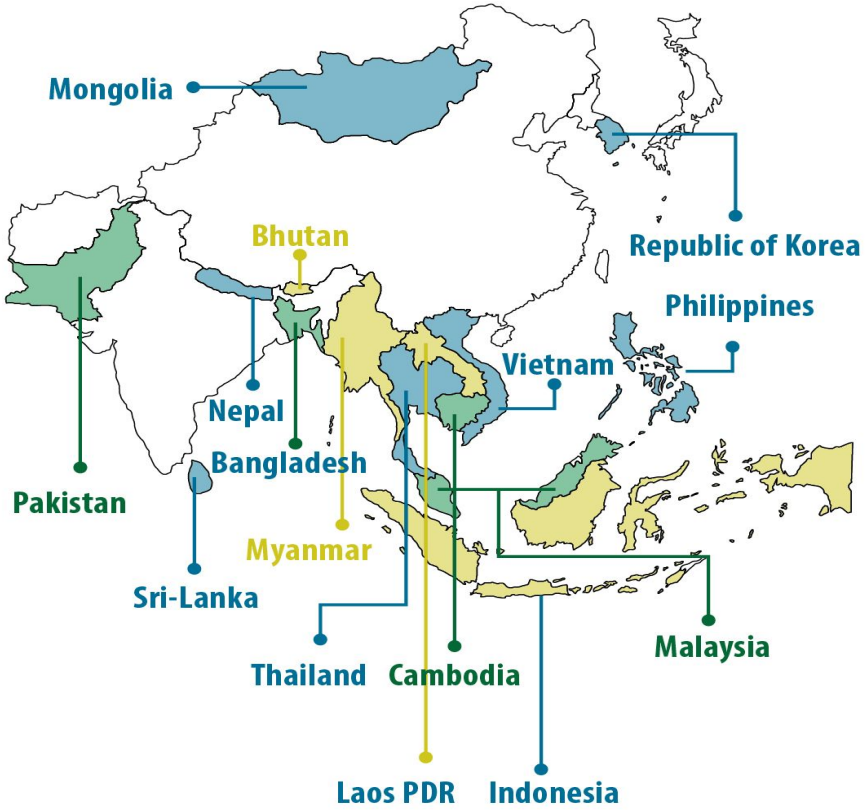
Capacity Building on Tools Frameworks & Approache

Knowledge Creation & Dissemination

Expert Assistance & Advisory Services

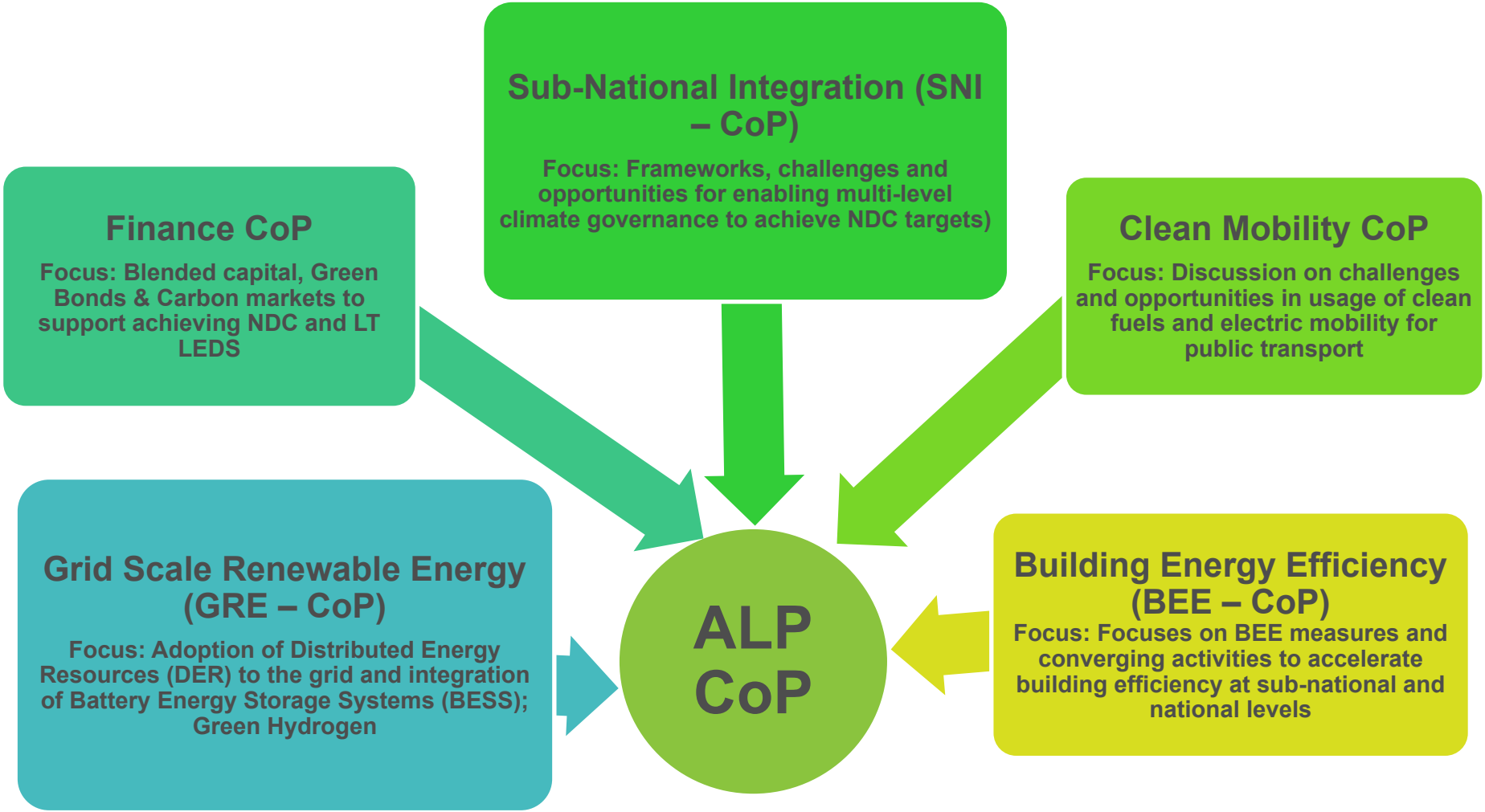
What is Asia LEDS Partnership?

The ALP network comprises **1273** members (**421** organizations and **852** individuals), from **15** Asian countries



Objectives

- Facilitate enhanced coordination, collaboration, and partnerships
- Identify and disseminate tools, models, approaches, and best practices in priority NDC/LTS/LEDS topics to enable peer-to-peer learning and application
- Foster capacity building of practitioners to make Asia a leader in designing and implementing NDC/LTS/ LEDS
- Strengthen support for NDC/ LTS/LEDS by catalyzing leaders of change and raising awareness about the benefits on these topics


Sub-National Integration (SNI – CoP)
Focus: Frameworks, challenges and opportunities for enabling multi-level climate governance to achieve NDC targets)
Finance CoP
Focus: Blended capital, Green Bonds & Carbon markets to support achieving NDC and LT LEDS
Clean Mobility CoP
Focus: Discussion on challenges and opportunities in usage of clean fuels and electric mobility for public transport
Grid Scale Renewable Energy (GRE – CoP)
Focus: Adoption of Distributed Energy Resources (DER) to the grid and integration of Battery Energy Storage Systems (BESS); Green Hydrogen
ALP CoP
Building Energy Efficiency (BEE – CoP)
Focus: Focuses on BEE measures and converging activities to accelerate building efficiency at sub-national and national levels

Leadership Group on Clean Transport in Asia

Who, why, what…

UCDAVIS
India ZEV Research Centre
Institute of Transportation Studies

NREL

SLOCAT Partnership

ICLEI
Local Governments for Sustainability

ASIA LEDS PARTNER SHIP

Leadership Group on Clean Transport in Asia (LGCTA)

Member Countries

Bangladesh
Bhutan
India
Indonesia
Laos PDR
Philippines
Sri Lanka
Thailand
Vietnam
Nepal
Mongolia

One Leadership Goal

Advancing transitions toward net-zero emission transport systems through integrated and inclusive solutions that support local economic development.

Net-zero Emission Transport Systems

Development of pathways to achieve transitions toward net zero transport systems at national and local levels

Implementing actions supported with technical assistance and peer collaborations and learning.

Regional Cooperation on Transport

Global Stocktake decision adopted at COP28

Calling on countries to contribute to global efforts on transport:

28. (g) **Accelerating the reduction of emissions from road transport on a range of pathways, including through development of infrastructure and rapid deployment of zero- and low-emission vehicles.**

Supporting efforts:

28. (a) **Tripling renewable energy capacity globally** and **doubling the global average annual rate of energy efficiency** improvements **by 2030**.

28. (d) **Transitioning away from fossil fuels in energy systems**, in a just, orderly and equitable manner, **accelerating action in this critical decade**, so as **to achieve net zero by 2050** in keeping with the science.

28. (e) **Accelerating zero- and low-emission technologies, including**, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, **and low-carbon hydrogen** production.

28. (f) **Accelerating and substantially reducing non-carbon-dioxide emissions globally, including** in particular **methane** emissions **by 2030.**

28. (h) **Phasing out inefficient fossil fuel subsidies that do not address energy poverty or just transitions, as soon as possible.**

Official text: Outcome of the first Global Stocktake - decision -/CMA.5

Global Stocktake decision adopted at COP28

Requesting countries to revisit and strengthen their NDCs:

21. (...) significantly **greater emission reductions are required** to align with global greenhouse gas emission trajectories

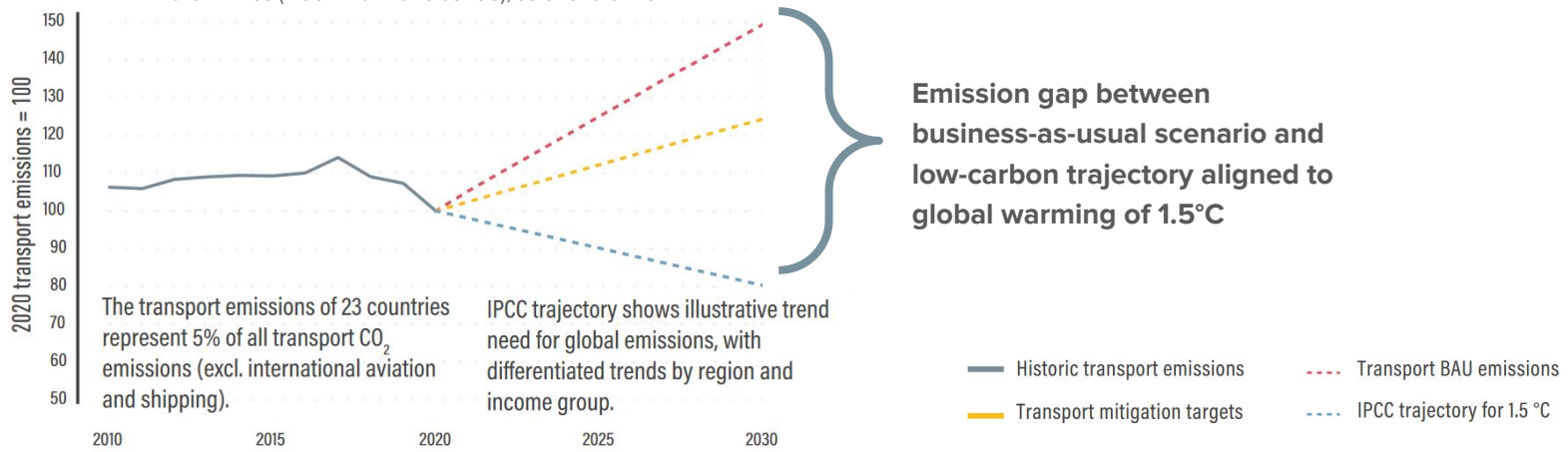
37. (...) Parties (...) to **revisit and strengthen the 2030 targets** in their nationally determined contributions as necessary t**o align with the Paris Agreement temperature goal by the end of 2024.**

40. Notes the importance of **aligning nationally determined contributions with long-term low greenhouse gas emission development strategies.**

Official text: Outcome of the first Global Stocktake - decision -/CMA.5

The quantity and scope of effective transport targets is limited

Transport CO_2 emission trajectories by countries with transport emission mitigation targets in their NDCs (index with 2020 as 100), as of end of 2022



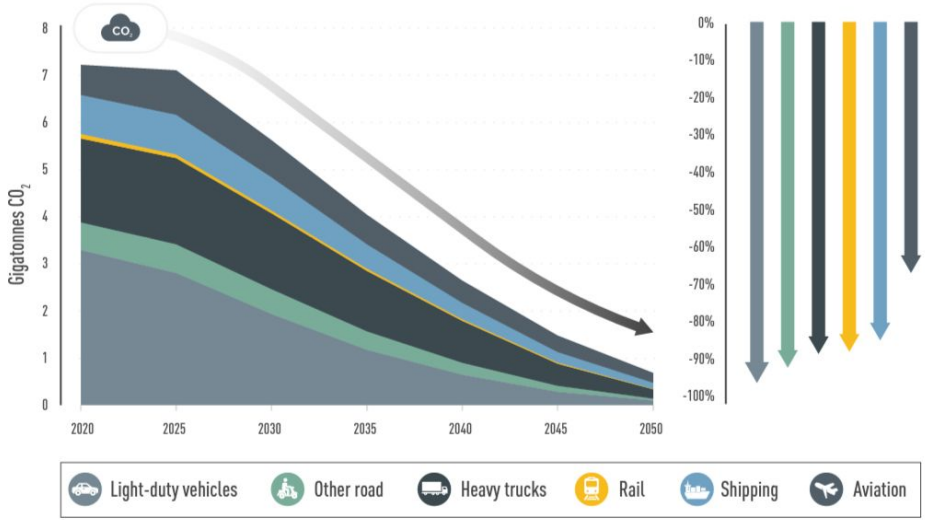
Examples of transport GHG mitigation targets from the NDCs by LG-CTA:

Bangladesh	Reduce transport CO_2 emissions 9.3% (to 32.89 Mt CO_{2eq}) below BAU by 2030 (unconditional contribution) or in total 27% (to 26.56 Mt CO_{2eq}) below BAU by 2030 (conditional contribution)
Sri Lanka	Reduce transport CO_2 emissions 4% below BAU by 2030 (1% unconditional, 3% conditional)

Required ambition for transport decarbonisation

Achieving transport pathways that limit global warming to below 1.5°C will require a 59% reduction in global transport CO_2 emissions by 2050.

Global transport CO_2 emission trajectories by mode required to achieve IEA net zero emissions scenario, 2020 to 2050



Road transport will have to reduce emissions by 90% or more from 2020 to 2050, spearheaded by light-duty vehicles (97% reduction).

Required ambition for transport decarbonisation

Of the second-generation NDCs, just 24 NDCs (or 16% of all submissions) had a target for mitigating transport greenhouse gas emissions.

Transport targets, by type, in second-generation NDCs

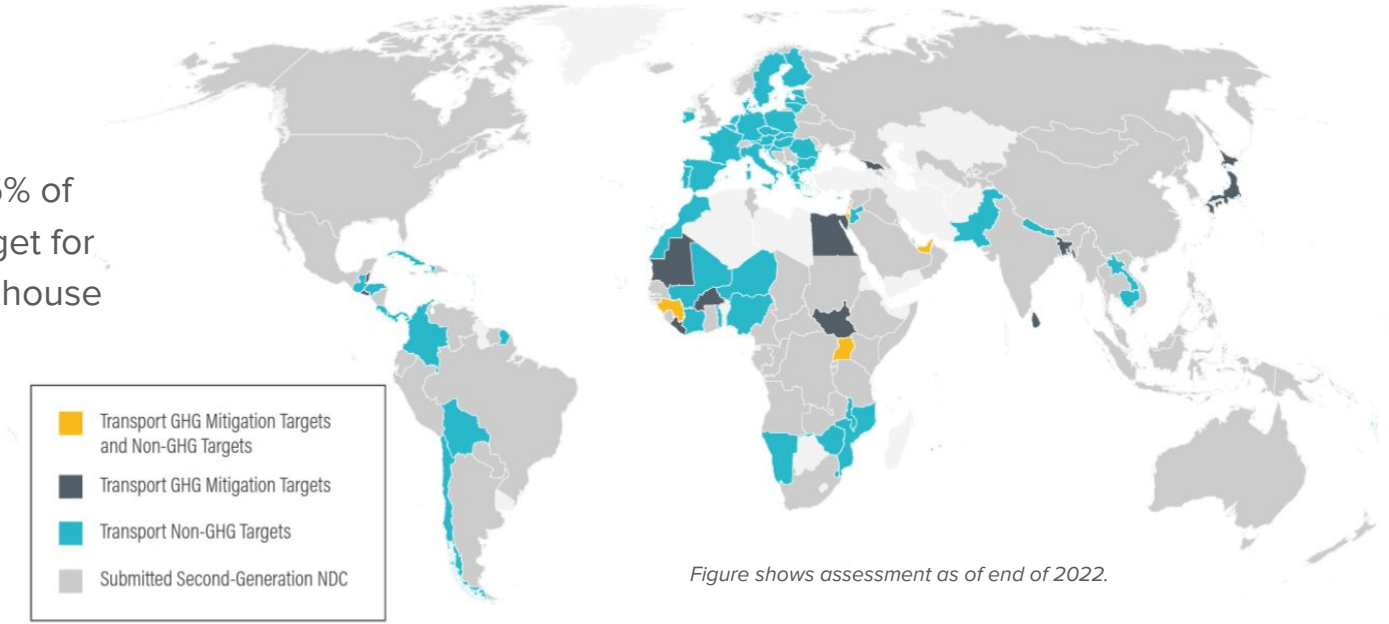
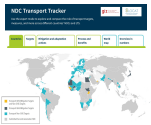


Figure shows assessment as of end of 2022.

Key findings - NDCs and LTS of countries in the Leadership Group*

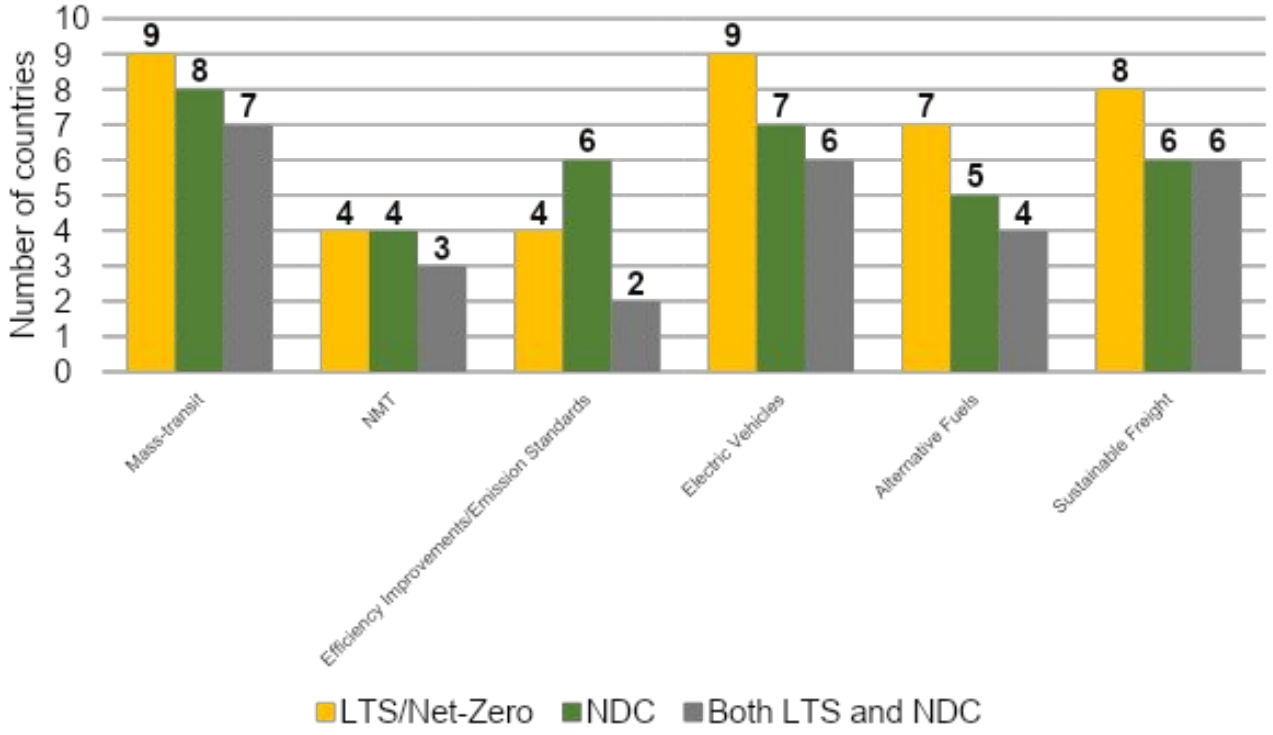
1. The quantity and scope of **effective transport targets** is limited (i.e., transport GHG mitigation targets and comprehensive non-GHG transport targets).
2. Very few NDCs and LTS feature a **comprehensive approach on transport.** The **focus is primarily on vehicle electrification**, with other topics addressed somewhat generally or superficially.
3. The **strong focus on "Improve" actions** is taking over a balanced approach across the Avoid-Shift-Improve framework.
4. **Transport adaptation and resilience** activities for specific modes remain limited.
5. **Freight transport is under-addressed** across mitigation and adaptation actions.
6. Very few NDCs and LTS connect **transport electrification and renewable energy actions**.

*Based on Bangladesh, Bhutan, India, Indonesia, Laos, Philippines, Sri Lanka, Thailand and Vietnam.



Findings are based on the GIZ-SLOCAT NDC Transport Tracker, a database on ambition, targets and policies in NDCs and Long-Term Strategies https://changing-transport.org/tracker/

Emerging themes: Road transport electrification, Emission control and Transit

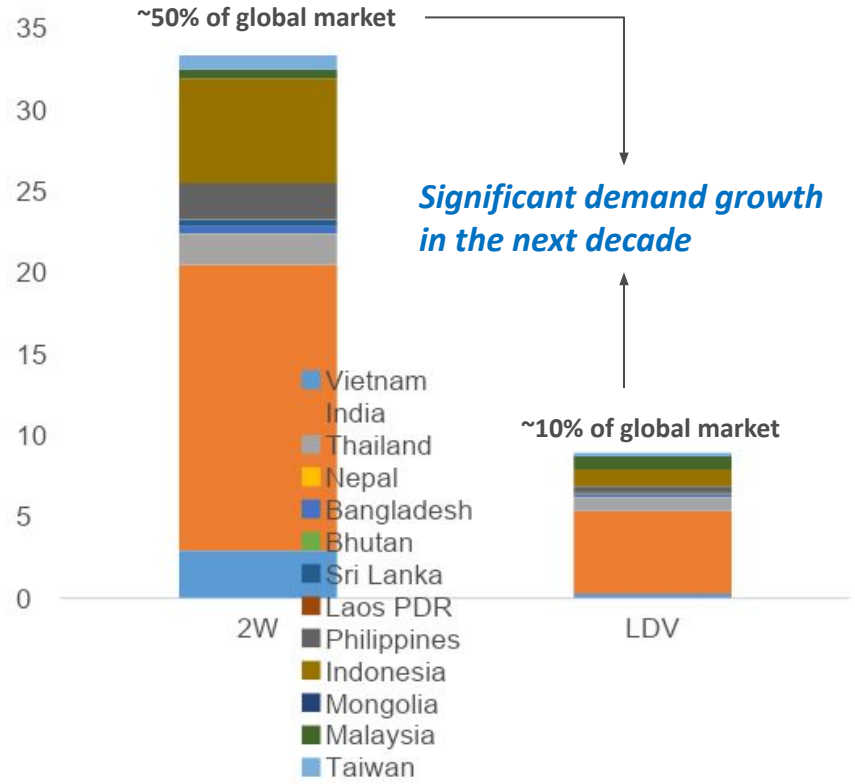


Key emerging themes

- Vehicle electrification
- Mass-transit
- Sustainable freight
- Efficiency / emission regulation

Number of countries that have LTS and NDC actions in place across different mitigation areas

Regional commitments in road transport can have global impact



In 2030….

…50% electrification…. (even at constant sales)

… >15 million electric two-wheelers (2W)

…. >4.5 million electric passenger cars (LDV)

Impacts of the transition in the region can extend to other global South markets in Africa and Latin America

The Leadership Group for Clean Transport in Asia initially identified 10 Impact Areas for collaborative learning across the Asia-Pacific Region

Key takeaways -

- Overall agreement that working in collaboration with other countries in the region would lead to more impactful Outcomes.
- Discussions resulted in focusing down to 10 impact areas that are the highest priority topics in the transport sector
- Top three preferred outcomes of the roundtable dialogue were technical. partnerships, funding partnerships, and knowledge exchange platforms.

Summary Report, September 2022

The Leadership Group for Clean Transport in Asia identified 10 Impact Areas for collaborative learning across the Asia-Pacific Region in the first two convenings

Charging Infrastructure

- Renewable Energy integration
- Grid integration (smart+demand charging, safety, capacity, codes, standards)
- Electric Vehicle (EV) bus deployment
- Setting up Green Routes (technical considerations)
- Standards for EV charging to ensure technology neutrality, e.g. public charging

Planning for Sustainable Transport

- Roadmap/action plan for incorporating EV and withdrawing Internal Combustion Engine (ICE) vehicles gradually
- Sustainble transport for rural sub-regions
- Equity in transport
- Improving the efficiency of existing fleet
- Equitable use of roads
- Planning for sustainable transport (master plan; strategy, action plan)

EV Batteries

- Battery disposal, recycle, critical mineral exraction, swapping policy and technology
- EV batteries standard, harmonize standard in region
- Retrofitting technology

Capacity Building, awareness and outreach

- Stakeholder workshop for attracting EVs
- Strategic action plan for EV promotion
- EV, public transportation, logistics/freight

EV Policies and regulation frameworks

- Harmionization of national EV policies/frameworks with neighboring countries, region
- EV Policy and Regulatory Framework: technical charging infrastructure; work force, public transport, lo coordination mechanism
- EV deployment roadmap
- EV readiness plan

Access to Finance and business models

- Public-Private Partnerships: business model; build, operate, and transfer)
- Business models to attract finance in EV sector
- Economic instruments to discourage use of ICE vehicles
- Incentive/funding for transport operator who will shift to EV
- Standards of operating procedures

Workforce Development

- Capacity Building on safe EV inspection, testing and maintenance
- Training technicians and other actors in repair/accident value chain

Public Transportation

- Technology for converting ICE vehicles to EV
- Phasng out inefficent buses
- Route optimization
- Bus rapid transit management, operation and safety strategy

2&3 Wheelers

- Comprehensive fitness certificate system for conversion of 2/3 wheelers
- Standard of EV conversion for 2/3 wheelers.

Logistics and Freight

- Best practiced logistics for freight management
- Dedicated lanes for electrified freight transport with charging facilities
- Using railways for freight transport

globalclimateactionpartnership.org

2023: Circularity of Electric Vehicle Batteries - Materials and Manufacturing to Recycling

Phase 1: EV Battery Circularity Principles: Technical trainings

Phase 2: Regional peer-learning: Front runner countries share lessons, best practices

Phase 3: Study tour: Visiting front runner country facilities

Phase 4: Training program review & develop action plans, next steps

Technical trainings

- Global material supply opportunities and challenges
- Supply chain considerations
- Battery life-time and performance
- Second life use options

Site visit - India

- Learning by observing front-runner country's industrial site
- Participants developed individual action plans resulting from a highly engaged learning experience

Training Series Outcomes

- Built capacity on of battery performance and lifetime themes
- Increased understanding of materials handling and associated hazards
- Knowledge built on policies and enabling environments
- Countries developed actions plans based on the learnings
- Enhanced engagement with private sector

LGCTA Convenings

2 May, 2024

22 May, 2024

Fuel Efficiency & Emission Standards

18 June, 2024

Aligning EV Targets

10 July, 2024

Leveraging Electrification as an Economic and Regional Cooperation Opportunity

20-22 August, 2024

In-person discussion of the draft communique at ALP Forum

29 Sep – 4 Oct

(in-person @ Foz, GCAP Global Forum)

December, 2024

Regional Ambition Statement

LGCTA Outputs & Communique

Outcome

- High-level Statement on **Communique on Regional Technical Cooperation for Clean and Sustainable Land Transport in Asia**
  - *All member countries to endorse the collective statement at EST Forum/COP29*
- Identify key clean transportation policy actions for member countries to be considered
- Lessons from policy and regulatory best practices in the region

Additional outcomes

- Country specific challenges/needs to be documented for future action
- Leverage synergies with other international platforms such as ZEVTC
- Facilitate partnerships and collaborations for implementing policy actions with support from regional MDB facilities

Key Action Areas

Safe **walking** and **cycling**	Affordable, accessible and safe **public and collective transport** systems	Intermodal, low-carbon **freight transport** systems
Robust **fuel efficiency and emission standards**	**Electric** zero emissions light-, medium- and heavy-duty **vehicles** and electrified **rail**	**Renewable energy** and **zero emission energy sources** for all transport modes

Way Forward: Strengthening regional cooperation

- Expansion of modernised, affordable, accessible and safe public and collective transport, railway, walking, cycling and micro-mobility infrastructure and networks.
- Deployment of intermodal, low-carbon and efficient freight transport infrastructure, operations, vehicles and fuels.
- Increased sales of electric vehicles (EV) across two/three-wheelers, cars, trucks and buses towards a share of 30% of total vehicle sales.
- Expansion of public EV charging infrastructure and safe and resilient grid integration.
- Reduction of CO_2 emissions from transport beyond 2019 levels and adoption of Euro VI emission standards for all types of vehicles by 2030.
- Integrated policies and regulations to mandate and incentivise the use of renewable energy and renewable fuels for all transport modes, e.g., renewable electricity, renewable fuels and renewable-based fuels.

Thank you!

Become an ALP Member!

Scan QR Code for Registration

Global Climate Action Partnership
regional leadership, global change

ASIA LEDS PARTNERSHIP

Q & A

ROUND TABLE ACTIVITY

ENABLE

- **Partnerships for Action:** How can partnerships between the public and private sectors be strengthened to mobilize resources for ambitious transport targets over the next 5 years?
- **Financing Priority Measures:** What strategies can be employed to implement and finance the most critical measures for transitioning to sustainable transport?

AVOID

- **Challenges in Avoiding:** What are the major challenges you face in leveraging opportunities to implement "Avoid" measures in the transport sector?
- **Optimizing Urban Planning:** How can urban planning be optimized to support the Avoid principle and foster more walkable, transit-oriented cities?

SHIFT - IMPROVE

- **Challenges in Shifting and Improvement:** What are the major barriers to implementing “Shift” and "Improve" measures (e.g., making vehicles more efficient or electrifying transport) in the sector?
- **Promoting Public and Non-Motorized Transport:** What strategies can be implemented to encourage greater use of public transport and non-motorized options, such as cycling and walking?
- **Improving Emissions and Efficiency:** What additional policies or innovations are needed to further improve vehicle efficiency and reduce emissions across the transport sector?

DEBRIEF & PLENARY FEEDBACK

SLOCAT
Partnership on Sustainable, Low Carbon Transport

ASOCIACIÓN Sustentar

Thank you for your attention!

www.globalclimateactionpartnership.org

Slocat: secretariat@slocatpartnertship.org
Transport Working Group: transporte@ledslac.org
Resource Efficiency Working Group: ef.recursos@ledslac.org

Global Climate Action Partnership
regional leadership, global change