Adapting the Sustainable Urban Mobility Plan concept in Asia: The MobiliseYourCity Asia Programme

27 May 2024

ADB AFD University of Central Punjab Lahore, Pakistan 2002 Mobilise Your City

Training Developed By

Mobilise Your City

Donors:

European Commission

AFD

Federal Ministry for Economic Cooperation and Development

Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE

Liberté
Égalité
Fraternité

FFEM

In collaboration with

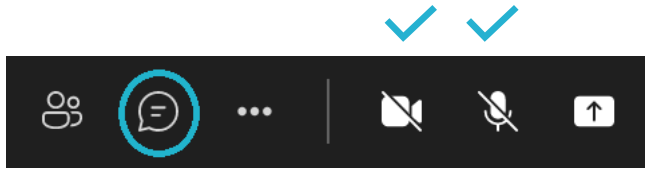
SYSTRA

Cerema
CLIMATE & REGIONS, THE FUTURE

Learn more about the MobiliseYourCity Partnership and our replicable training offers: https://www.mobiliseyourcity.net/mobiliseyourcity-training-materials-catalogue

Some general notes on this session

Make sure your mic is muted and your camera is turned off



This session will be recorded. You will not appear in the recording if your camera is kept off

Include your questions in the chat, we will pose them in the Q&A at the end of the session

Urban Mobility Challenges in Asia

- **Traffic Congestion:** Daily traffic jams are a significant issue, causing delays and reducing economic productivity.
- **Increasing Air Pollution:** High levels of vehicular emissions contribute to deteriorating air quality and health problems.
- **Need for Efficient Public Transport:** Current systems are inadequate, leading to overreliance on private vehicles and exacerbating congestion.

Impact on Quality of Life: These challenges hinder economic growth and reduce the quality of life for millions of residents.

Outline

1. Welcome & Introduction
2. The MobiliseYourCity Partnership: Sustainable Urban Mobility Plans for Asia, Africa and Latin America
3. Adapting the SUMP concept for Asian cities
4. Questions and answers
5. Online Poll

Mobilise Your City

Speakers

Nicolás Cruz González

Sustainable Mobility Expert

MobiliseYourCity Secretariat

Clément Musil

Programme Manager

MobiliseYourCity Asia

Muhammad Awais Shafique

Assistant Professor

University of Central Punjab

Moderator

Mobilise Your City

Objectives of the training

- → Present the specificities of urban mobility challenges for cities in the Global South
- → Define the SUMP concept and why it supports sustainable mobility planning
- → Describe the main phases and steps in preparing a SUMP
- → Present real case studies on SUMP development in Asia

The MobiliseYourCity Partnership

Linking urban mobility challenges with global issues

ADB AFD University of Central Punjab Lahore, Pakistan 2002 Mobilise Your City

An impactful partnership between the EU, France and Germany, established at COP21

Donors:

AFD

European Commission

Federal Ministry for Economic Cooperation and Development

Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

FFEM

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

Implementing Partners:

AFD

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

ADB

ADEME AGENCE DE LA TRANSITION ÉCOLOGIQUE

European Bank for Reconstruction and Development

Cerema

Codatu

Wuppertal Institut

KFW

Knowledge and Network Partners:

ECF EUROPEAN CYCLISTS' FEDERATION

ITDP Institute for Transportation & Development Policy

PLATFORMA LOCAL & REGIONAL INTERNATIONAL ACTION

GlobalNetwork for PopularTransportation

despacio

SSATP Africa Transport Policy Program

TRUFI ASSOCIATION

UCLG United Cities and Local Governments

UN HABITAT FOR A BETTER URBAN FUTURE

In collaboration with:

tumi

Euroclima

Financiado por la Unión Europea

Digital Transport for Africa

SUSTAINABLE mobility FOR ALL

Marrakech Partnership

Global Climate Action

Mobilise Your City

The MobiliseYourCity Global Partnership

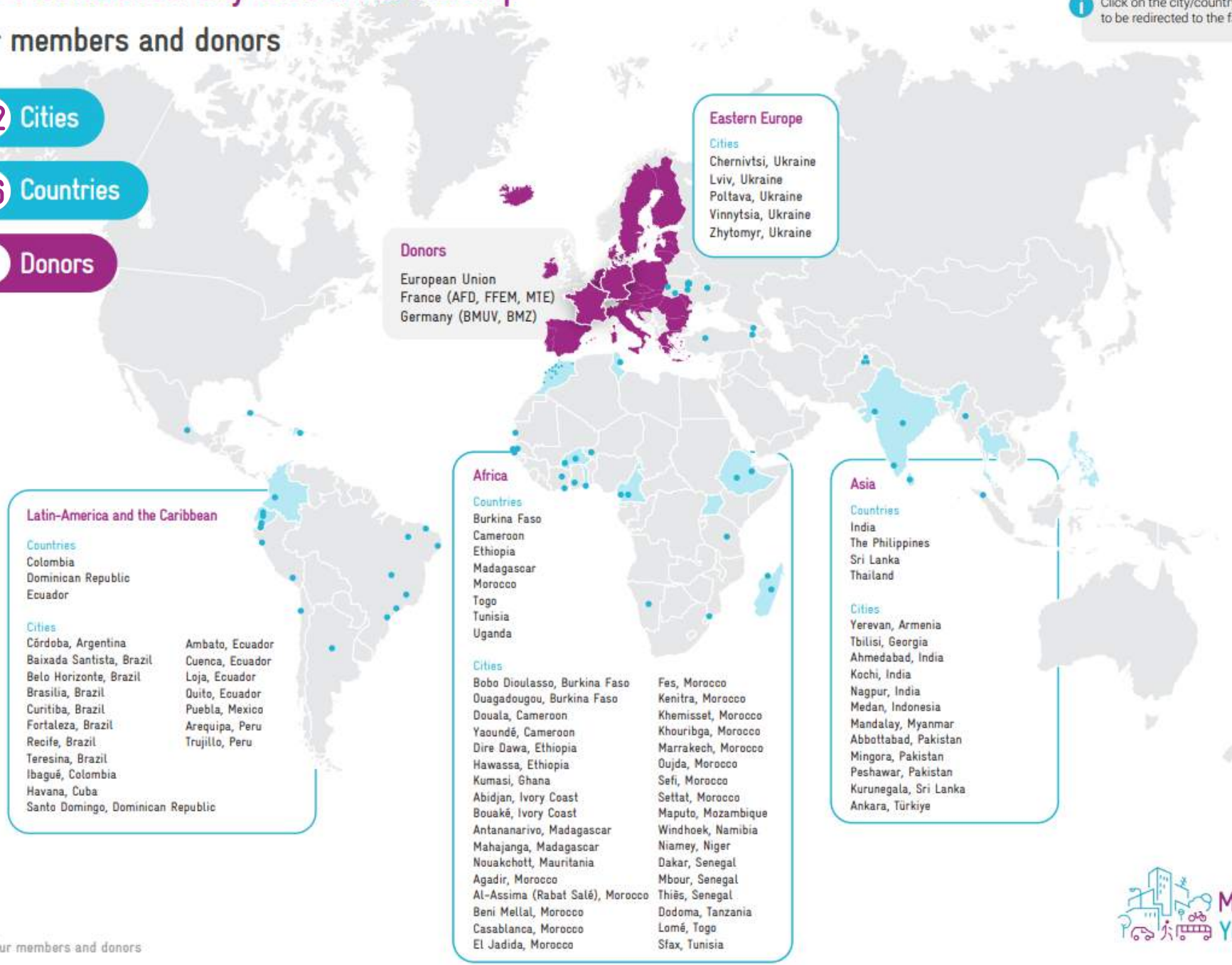
Our members and donors

72 Cities

16 Countries

6 Donors

Click on the city/country of your interest to be redirected to the factsheet.



Latin-America and the Caribbean

Countries
Colombia
Dominican Republic
Ecuador

Cities
Córdoba, Argentina
Baixada Santista, Brazil
Belo Horizonte, Brazil
Brasilia, Brazil
Curitiba, Brazil
Fortaleza, Brazil
Recife, Brazil
Teresina, Brazil
Ibagué, Colombia
Havana, Cuba
Santo Domingo, Dominican Republic
Ambato, Ecuador
Cuenca, Ecuador
Loja, Ecuador
Quito, Ecuador
Puebla, Mexico
Arequipa, Peru
Trujillo, Peru

Donors

European Union
France (AFD, FFEM, MTE)
Germany (BMUV, BMZ)

Eastern Europe

Cities
Chernivtsi, Ukraine
Lviv, Ukraine
Poltava, Ukraine
Vinnytsia, Ukraine
Zhytomyr, Ukraine

Africa

Countries
Burkina Faso
Cameroon
Ethiopia
Madagascar
Morocco
Togo
Tunisia
Uganda

Cities
Bobo Dioulasso, Burkina Faso
Ouagadougou, Burkina Faso
Douala, Cameroon
Yaoundé, Cameroon
Dire Dawa, Ethiopia
Hawassa, Ethiopia
Kumasi, Ghana
Abidjan, Ivory Coast
Bouaké, Ivory Coast
Antananarivo, Madagascar
Mahajanga, Madagascar
Nouakchott, Mauritania
Agadir, Morocco
Al-Assima (Rabat Salé), Morocco
Beni Mellal, Morocco
Casablanca, Morocco
El Jadida, Morocco
Fes, Morocco
Kenitra, Morocco
Khemisset, Morocco
Khouribga, Morocco
Marrakech, Morocco
Oujda, Morocco
Sefi, Morocco
Settat, Morocco
Maputo, Mozambique
Windhoek, Namibia
Niamey, Niger
Dakar, Senegal
Mbour, Senegal
Thiès, Senegal
Dodoma, Tanzania
Lomé, Togo
Sfax, Tunisia

Asia

Countries
India
The Philippines
Sri Lanka
Thailand

Cities
Yerevan, Armenia
Tbilisi, Georgia
Ahmedabad, India
Kochi, India
Nagpur, India
Medan, Indonesia
Mandalay, Myanmar
Abbottabad, Pakistan
Mingora, Pakistan
Peshawar, Pakistan
Kurunegala, Sri Lanka
Ankara, Türkiye

1 **MOBILITY PLANNING**

Supporting implementation and investment-ready plans or pilot projects for inclusive and low-carbon transport

2 **CAPACITY BUILDING**

Equipping practitioners with tested and scalable solutions

3 **ADVOCACY**

Encouraging institutions and individuals to embrace and resource sustainable mobility

4 **IMPLEMENTATION SUPPORT**

Empowering members to bridge planning with implementation for green and just cities

Mobilise Your City

Mobilise Your City

Figure 2. Our members and donors

MobiliseYourCity's guiding principles

1

Our vision

We work together as partners to shape low-carbon mobility systems that contribute to efficient, safe, and just cities for all urban residents of today and the future.

2

Our mission

Our mission is to incubate solutions, accelerate the adoption of proven approaches, and facilitate complex change processes to transform urban mobility

Our objectives

Accelerate the green and just transition to sustainable urban mobility

Facilitate access to sustainable innovative finance for large- and small-scale mobility projects

Foster more comprehensive, integrated and participatory urban mobility planning

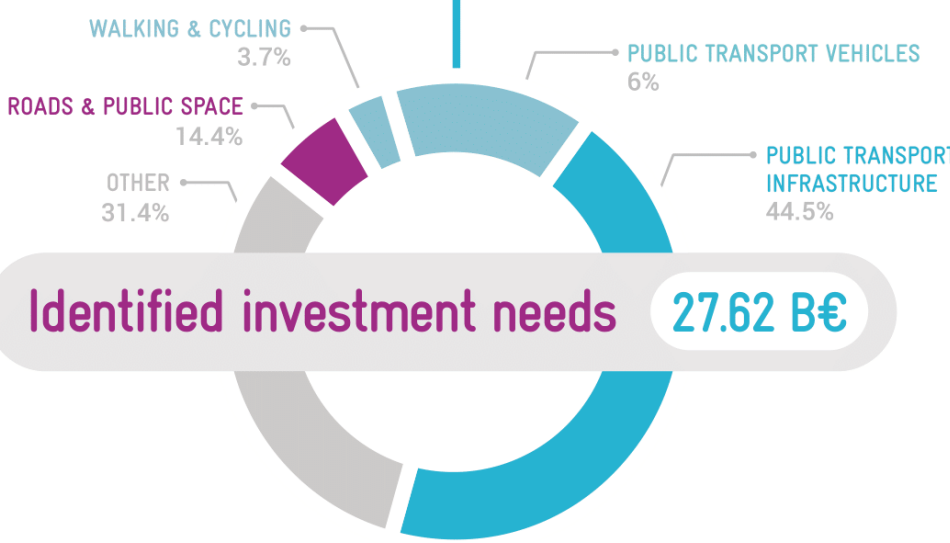
Close the investment gap for sustainable mobility

Mobilise Your City

Leveraging finance from SUMPs and NUMPs

54.7 M€ Donor contribution

COMPLETED **19** SUMPs **6** NUMPs



Identified investment needs 27.62 B€

An additional 12 SUMPs and 3 NUMPs are currently under preparation, which will increase the identified investment needs, leveraged finance and impacts.

The percentages represented in the pie chart cover SUMPs investments, which represent a total investment need of 18.28 B€.

Mobility plans are key in securing financing

SUMPs and NUMPs help our city and country members identify the right projects or programmes for their needs, and we are able to identify the selected measures with cost estimates.

Leveraged finance 1.75 B€

DESTINATION

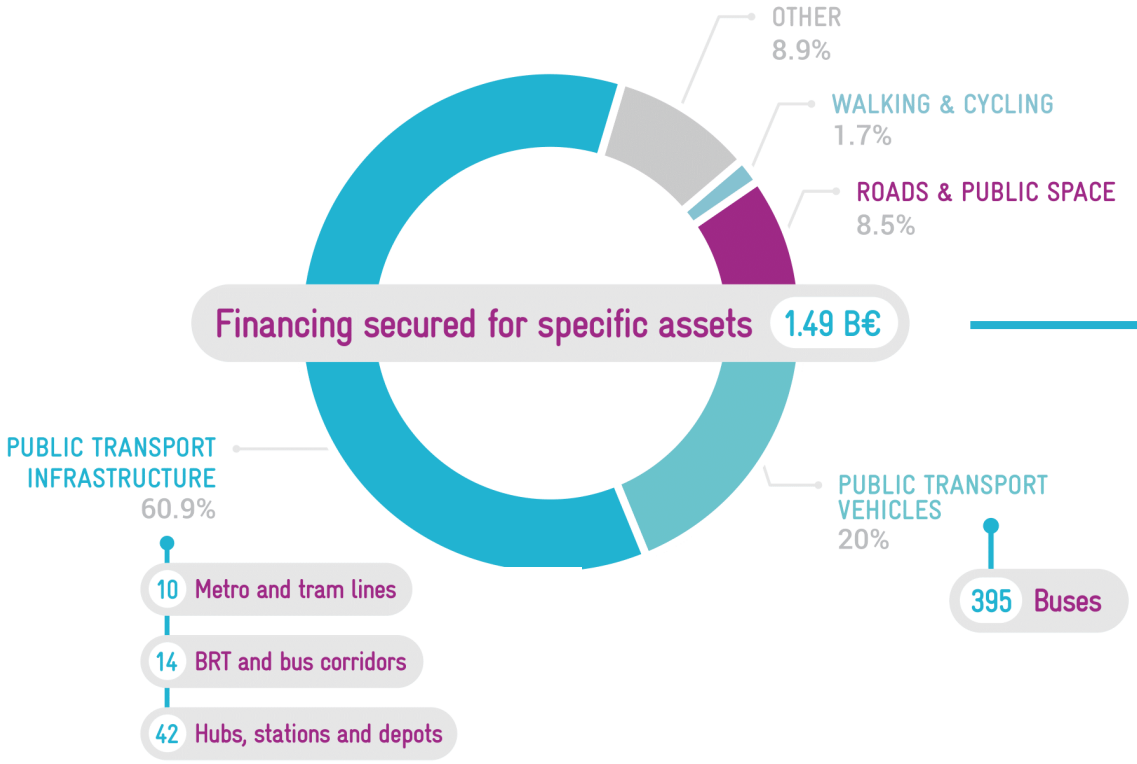
Countries 1,155 M€ | Cities 597 M€

SOURCES

Domestic 37.4% | International loans 57% | International grants 5%

Mobilise Your City

Financed investments and projected impacts



Mobilise Your City

Contributing to low-carbon, safe, and just cities

- Annual GHG emissions in 2030 will be 15.56 $MtCO_2$ lower (compared to BAU)
- SUMP implementation will enable cities to cut 16% of their annual emissions by 2030
- 10.5 million additional people will have access to public transport
- +5% modal share of sustainable transport modes (compared to BAU)
- 841 lives saved annually through better road safety
- Improved job quality for transport workers

Sustainable Development and the SDGs

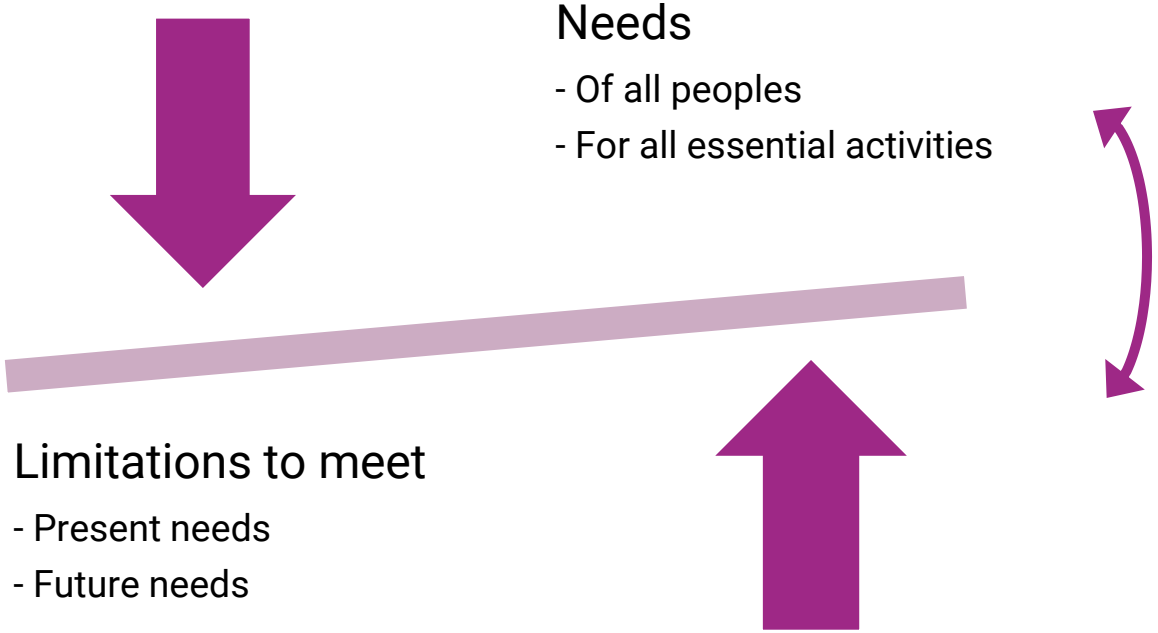
What does urban mobility have to do with them?

ADB AFD University of Central Punjab Lahore, Pakistan 2002 Mobilise Your City

Sustainable Development

→ “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

Brundtland Commission Report (1987)



Sustainable development

- Balance between social, environmental, and economic dimensions

+ adapted governance

Sustainable Development

17 sustainable development goals (SDG)

"A blueprint to achieve a better and more sustainable future for all by 2030"

https://sdgs.un.org/goals

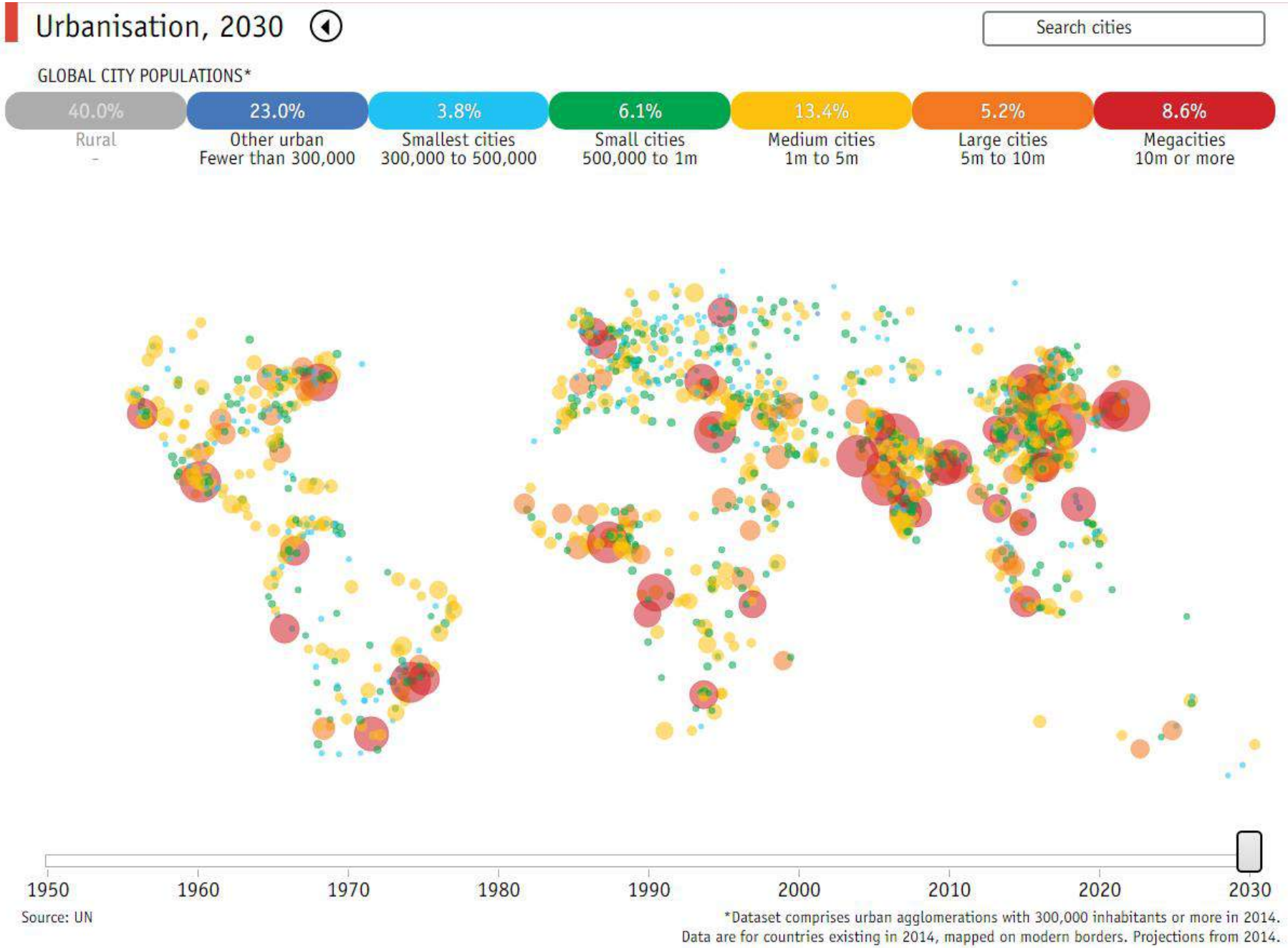
Mobilise Your City

Source: MobiliseYourCity contribution to sustainable developement goals (SDG), 2020.

Sustainable Development

Sustainable mobility contributes to SDG

Mobilise Your City


Urbanisation, 2030
Search cities
GLOBAL CITY POPULATIONS*
40.0%
Rural
23.0%
Other urban
Fewer than 300,000
3.8%
Smallest cities
300,000 to 500,000
6.1%
Small cities
500,000 to 1m
13.4%
Medium cities
1m to 5m
5.2%
Large cities
5m to 10m
8.6%
Megacities
10m or more
1950
1960
1970
1980
1990
2000
2010
2020
2030
Source: UN
*Dataset comprises urban agglomerations with 300,000 inhabitants or more in 2014.
Data are for countries existing in 2014, mapped on modern borders. Projections from 2014.

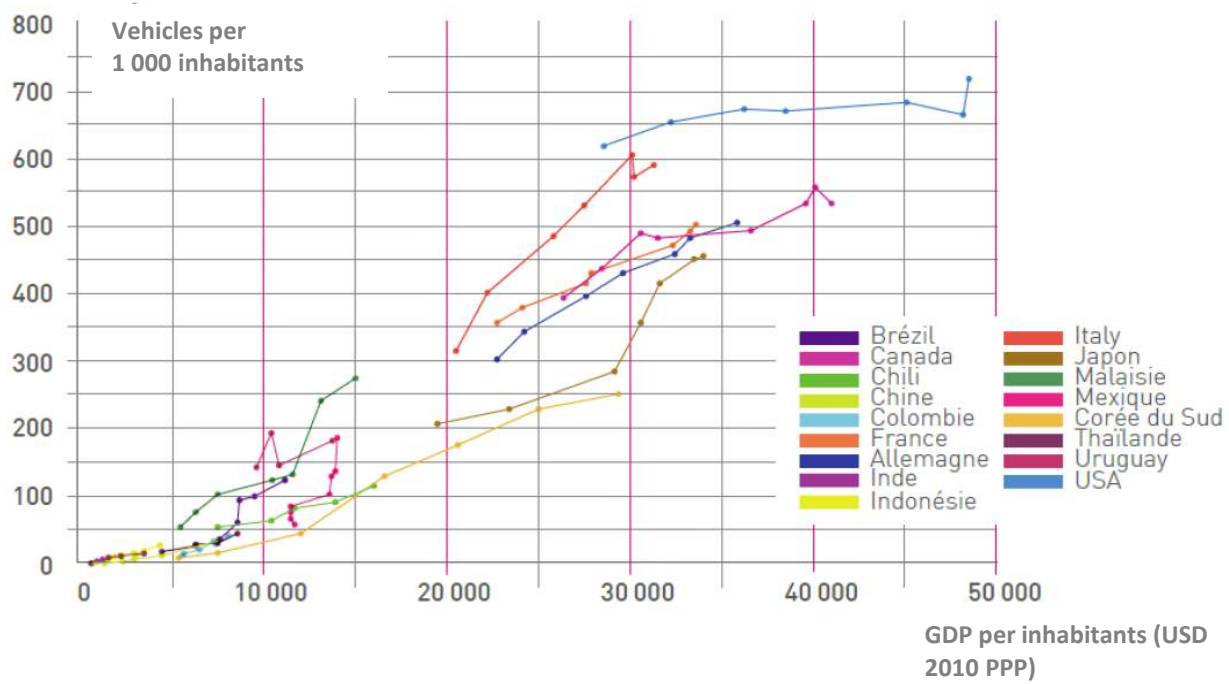
The traditional transport approach

Economic growth implies an increase in mobility

+

Car-ownership tends to increase with GDP

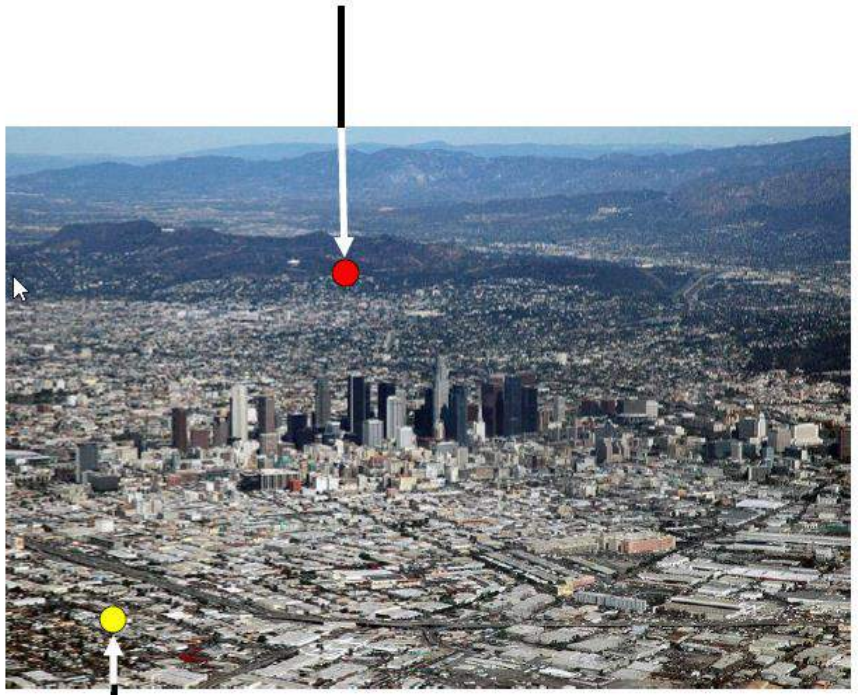
→ Motorised and carbonised mobility



- ✓ Traffic is the key
- ✓ Mono-modal approach
- ✓ Infrastructure-base
- ✓ Project approach
- ✓ Transport only
- ✓ Short and middle terms
- ✓ For an institutional area
- ✓ Limited impact assessment

The traditional transport approach

My home



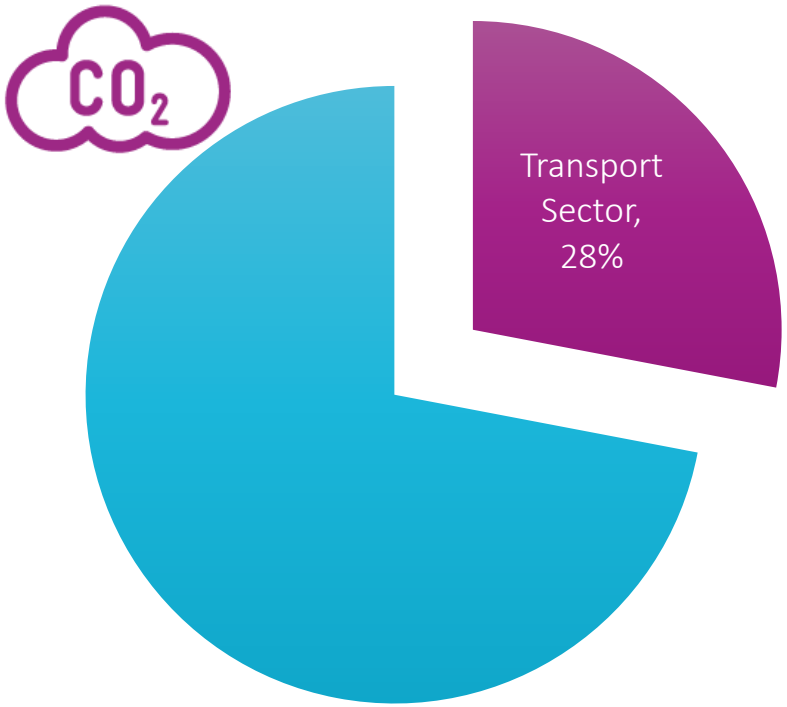
My work

Fortunately…

I have a car!

Need to tackle urban transport emissions

Urban transport is the sector with the **highest growth rate** and needs to be taken into account to achieve the 2-degree target



50% CO_2

emissions from urban transport

2/3 **of world population in cities in 2050**

> 5 400 Billion USD / year = 2 UK GDP

Mobilise Your City

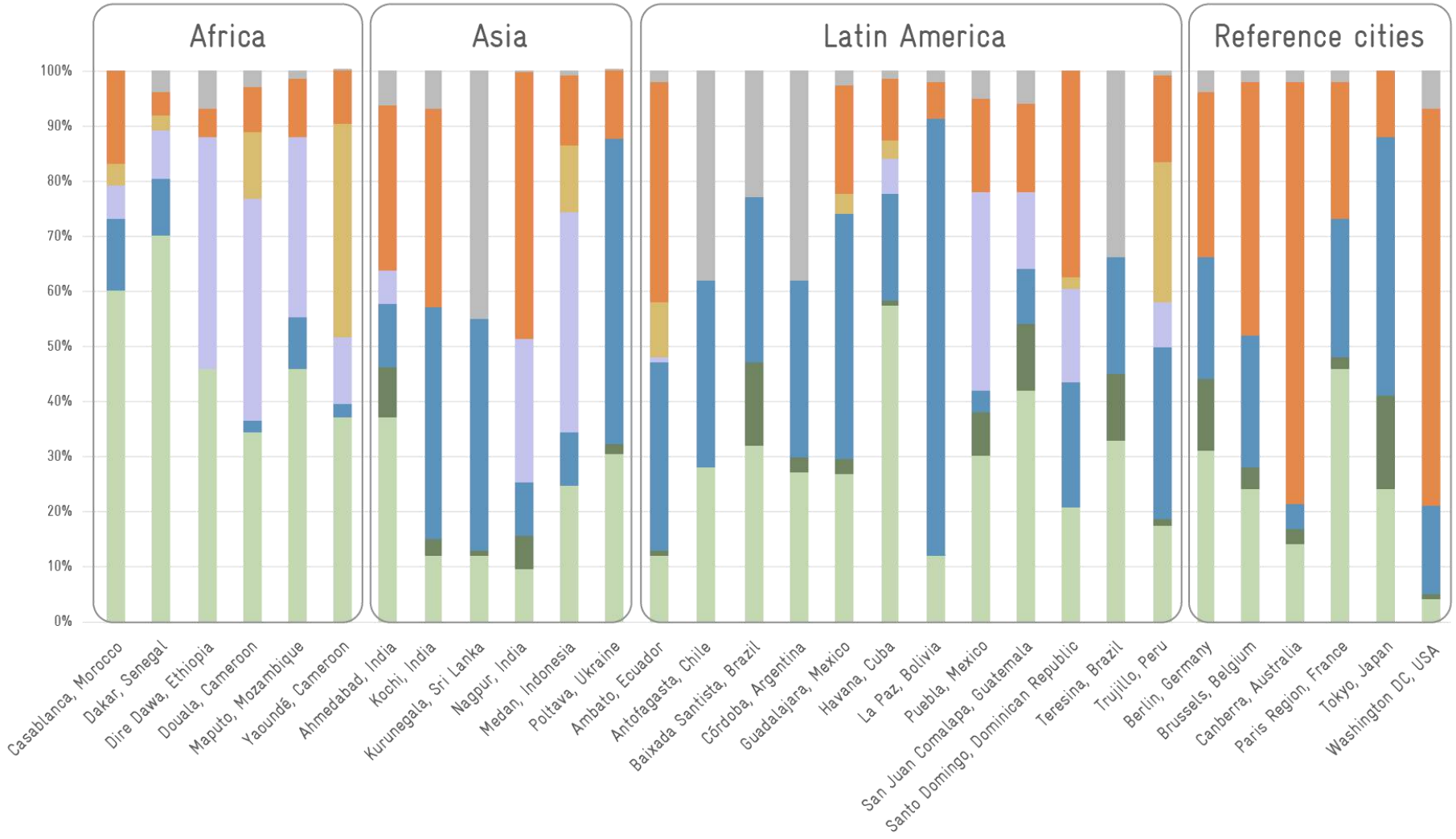
Need to tackle congestion and road safety

- Road congestion: lost time, variations in travel times, fuel consumption, GHG and pollutant emissions, noise emission, stress, …
  → Economic, social and environmental costs
- Purely infrastructure-based solutions are inefficient
- Integrated approach including all modes (motorized modes, PT, actives modes, paratransit) and urbanism / mobility
- Urbanism and mobility integration

BUT...

Modal split in MobiliseYourCity member cities

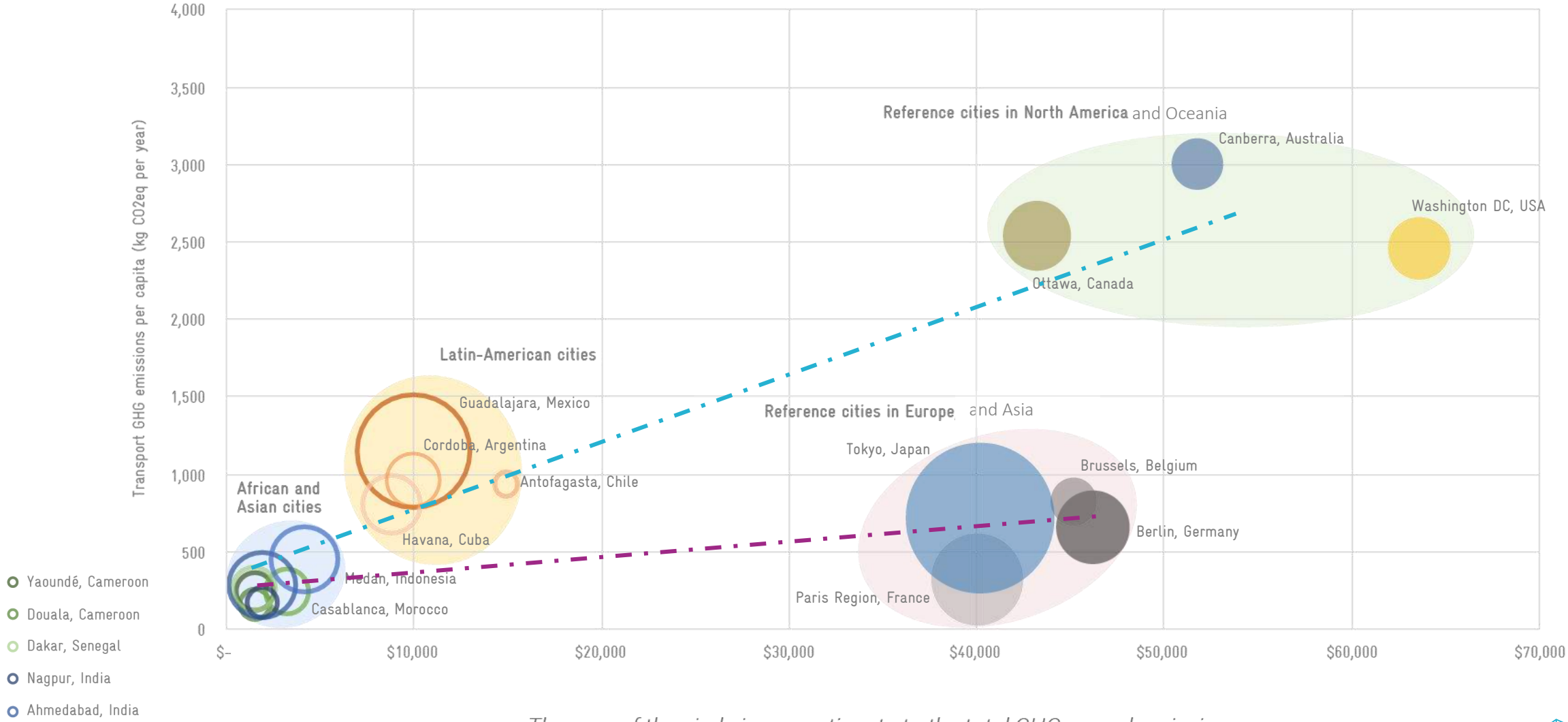
and reference cities



Mobilise Your City

Transport related GHG emissions in MobiliseYourCity member cities

and reference cities



The area of the circle is proportionate to the total GHG annual emissions

Mobilise Your City

The concept of sustainable urban mobility

MobiliseYourCity in action

The MobiliseYourCity vision for sustainable mobility

Low carbon

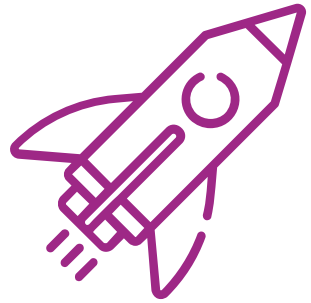
+

Efficient

+

Safe and just

=



Sustainable Mobility

- People are key
- All modes and all services contribute to the same goals
- At the scale of the Functional Urban Area

Mobilise Your City


Working for equity

- Mobility is the key to jobs, services, education, health…
- Urban mobility can represent a high share of daily wages
- A car-oriented mobility policy is inequitable
- Public Transport and active modes for social equity

Informal modes can represent "*20 to 25 % of daily wages in rapidly growing cities* such as Delhi (India), Buenos Aires (Argentina) and Manila (the Philippines), *and as much as 30 %* in Nairobi (Kenya), Pretoria (South Africa) and Dar es Salaam (Tanzania)" *

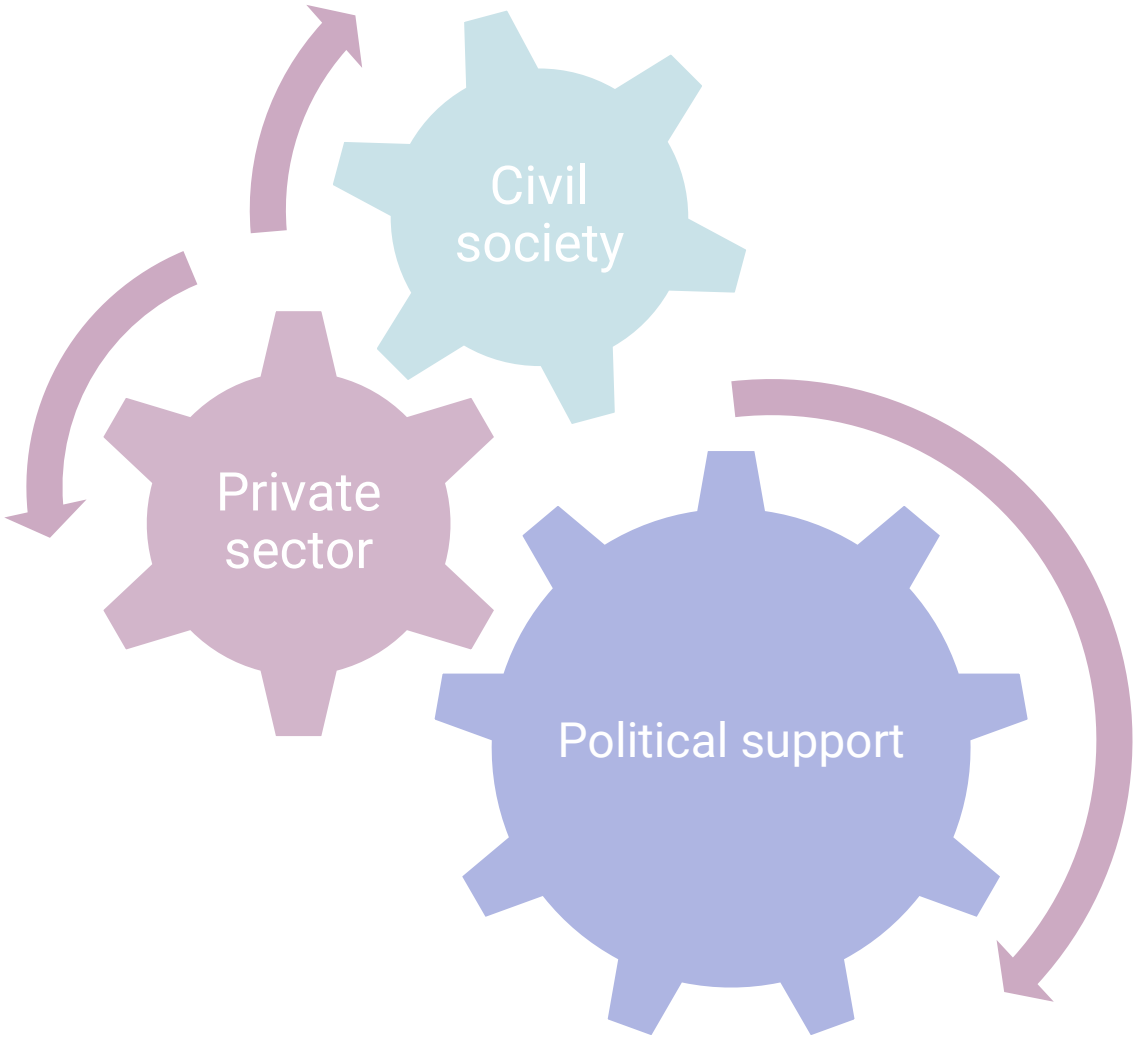
Mobilise Your City

Barriers to sustainable mobility

Barriers (and possible solutions) are as diverse as cities and urban transport system themselves

- Lack of budget for funding urban mobility
- Limited skilled staff resources
- No clear-cut responsibilities
- Traditional ways of transport planning focusing on infrastructure or individual projects
- Lack of stakeholder involvement
- Hardships in resolving target conflicts between different road users and urban functions
- Lack of vision and strategy for the future of mobility in your city

Support to sustainable mobility



- ✓ Enhanced quality of life and a livable city for all
- ✓ Efficient use of resources: the best projects with maximized global impacts, including interactions between different mobility services
- ✓ Systemic approach where different public policies converge
- ✓ Contribution to international and national objectives: GHG, SDG, …

Mobilise Your City

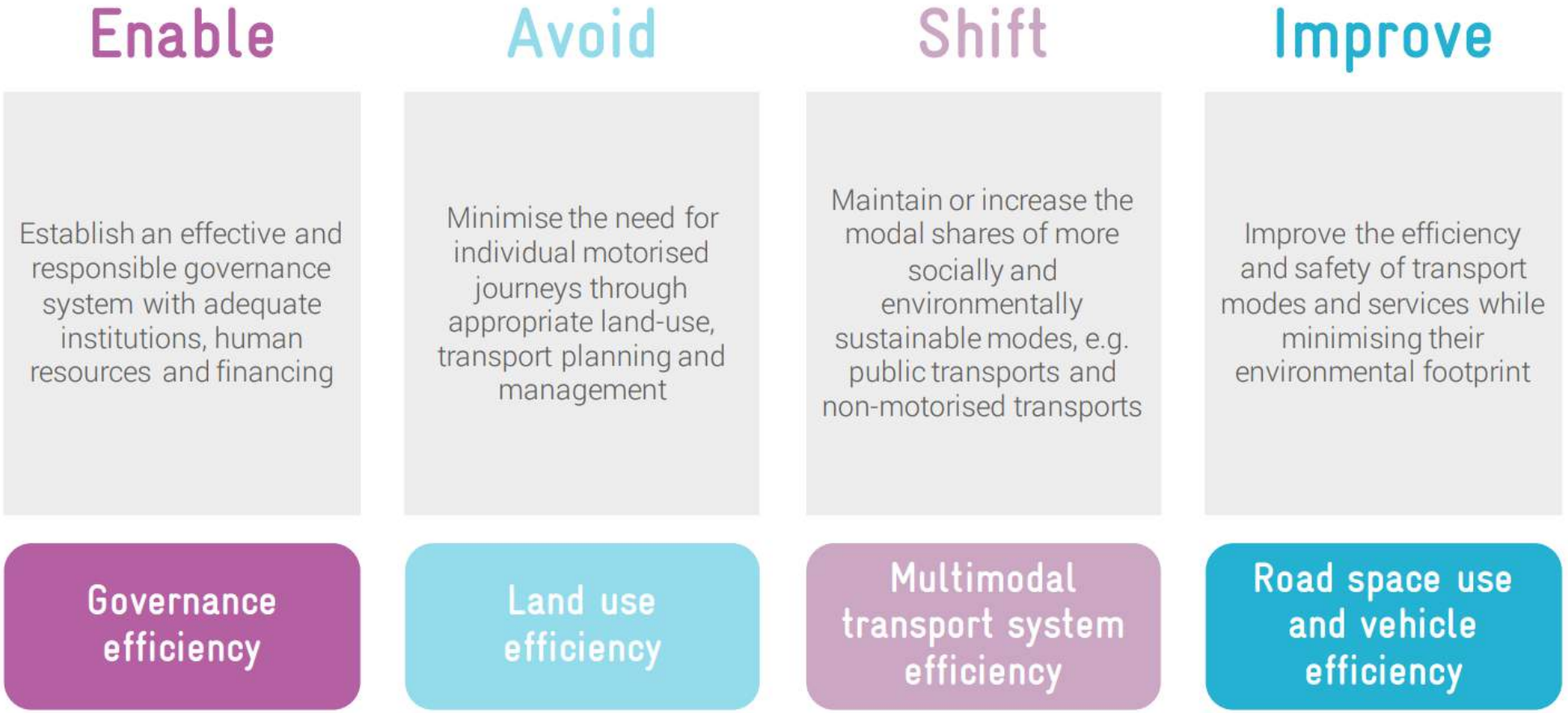
(E)ASI approach

A tool for developing sustainable mobility

1. Enable
2. Avoid
3. Shift
4. Improve

Mobilise Your City

(E)ASI approach



(E)ASI approach - E for "Enable"

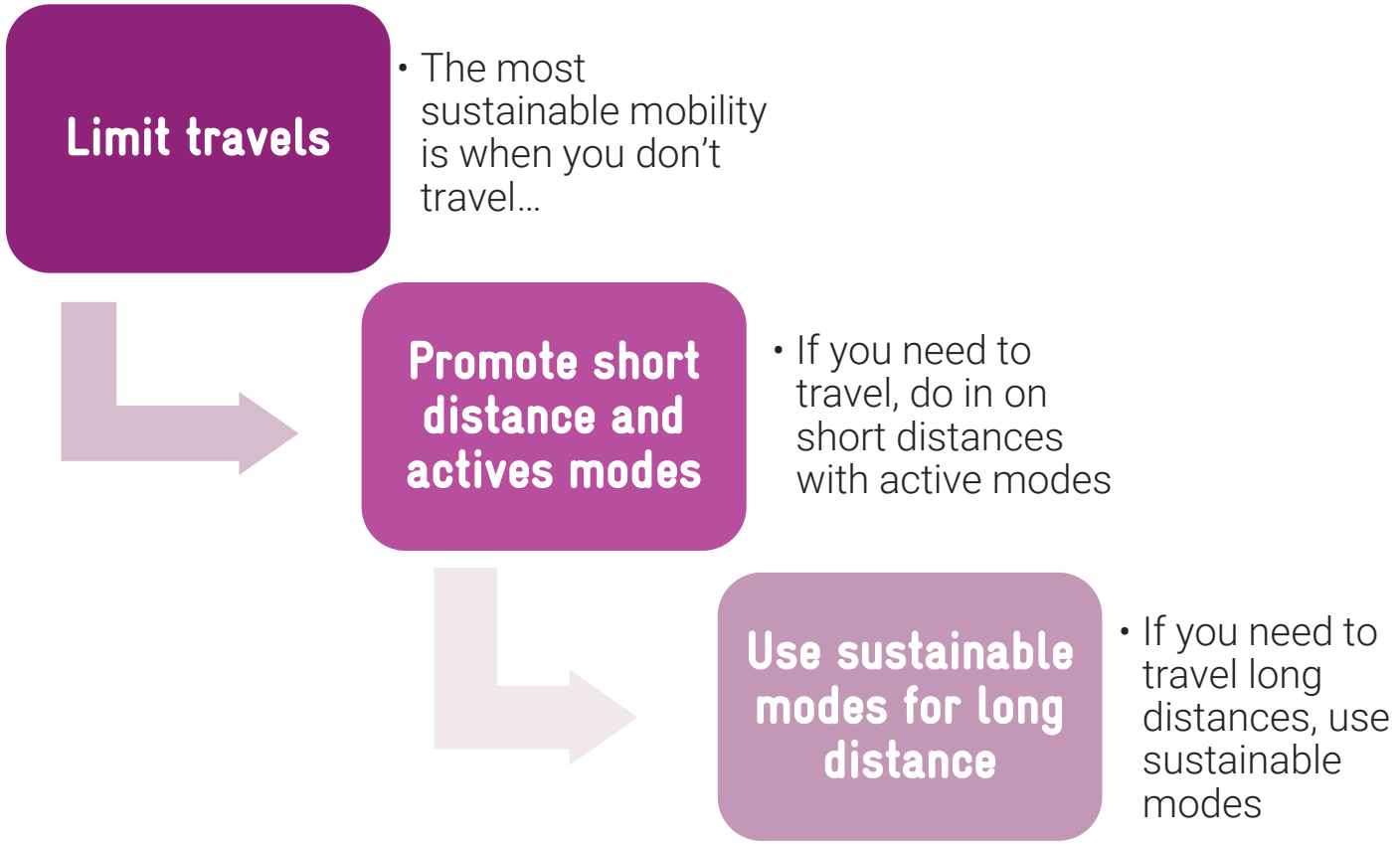
Create a framework where action is possible

- ✓ Competences are clearly defined
- ✓ An organisation is in charge of urban mobility planning
- ✓ Available human resources and trained staff
- ✓ Financial resources
- ✓ Public and private sectors are associated
- ✓ Concertation of civil society and citizens

Coordination between national (regional) and local level!
NUMP: National Urban Mobility Policy and Investment Program

(E)ASI approach - A for "AVOID"

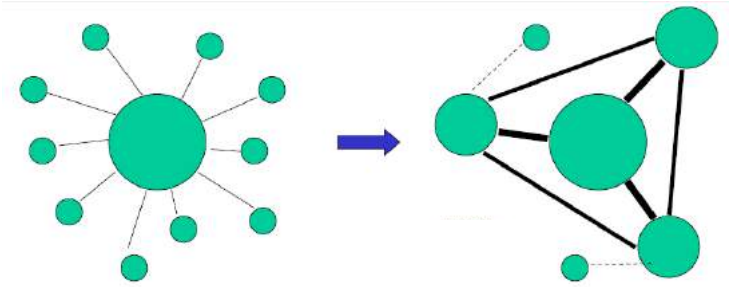
Avoid or limit the increase in travelled kilometers



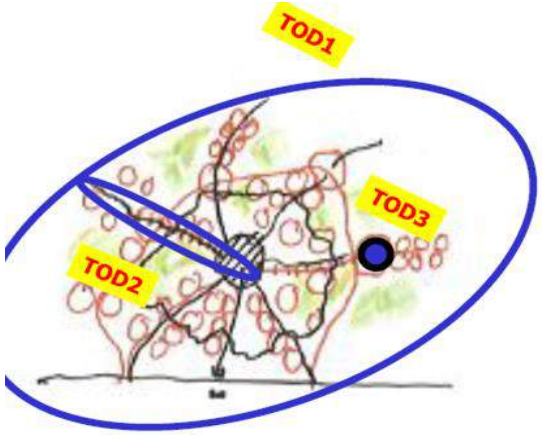
(E)ASI approach - A for "AVOID"

Avoid or limit the increase in travelled kilometers

✓ Diversity



✓ Density



✓ Design

(E)ASI approach - S for "Shift"

Shift to more sustainable transport modes

	 Mixed Traffic	 Standard Bus	 Cyclists	 One lane BRT	 Pedestrians	 Tram	 Regional Train
Capacity per corridor (person/hour/direction)	2 000	9 000	14 000	17 000	19 000	22 000	80 000
Energy intensity (MJ/p.krn)	1.65-2.45	0.32-0.91	0.1	0.24	0.2	0.53-0.65	0.15-0.35
Energy source	Fossil	Fossil	Food*	Fossil	Food*	Electricity	Electricity

- ✓ Preserve and increase the use of modes that consume the least energy
- ✓ Shift travels with individual motorised modes to public transport and active modes

(E)ASI approach - S for "Shift"

Promote active modes

- Safe, continuos networks
- Safe and preserved sidewalk
- Make active modes efficient: create permeability across road and train infrastructures, across buildings, …

Develop Public Transport

- Coverage of the whole functional area
- Frequency and capacity
- Level of service: comfort, safety, reliability
- Affordable and integrated prices

Limit the use of individual car

- Regulatory action : speed limits, low-emission zones, congestion toll, vehicle registration licence, …
- Car parking policy
- Tax policy: fuel tax, licence, ...

(E)ASI approach - I for "Improve"

Improve the efficiency of mobility

- Decrease congestion and increase the number of passengers per vehicle
- Improve energy efficiency of vehicles
- Promote new energy sectors: electric vehicles, renewable energies, …

Figure 1: Differences between traditional transport planning and Sustainable Urban Mobility Planning

Traditional Transport Planning		Sustainable Urban Mobility Planning
Focus on traffic	→	Focus on **people**
Primary objectives: Traffic flow capacity and speed	→	Primary objectives: **Accessibility** and **quality of life**, including social equity, health and environmental quality, and economic viability
Mode-focussed	→	**Integrated development of all transport modes** and shift towards sustainable mobility
Infrastructure as the main topic	→	**Combination** of infrastructure, market, regulation, information and promotion
Sectoral planning document	→	Planning document **consistent with related policy areas**
Short and medium-term delivery plan	→	Short and medium-term delivery plan embedded in a **long-term vision and strategy**
Covering an administrative area	→	Covering a **functional urban area** based on travel-to-work flows
Domain of traffic engineers	→	**Interdisciplinary** planning teams
Planning by experts	→	Planning with the **involvement of stakeholders and citizens** using a transparent and participatory approach
Limited impact assessment	→	Systematic **evaluation** of impacts to facilitate **learning** and improvement

Sustainable urban mobility and comparison with traditional approach

Mobilise Your City

What is a Sustainable Urban Mobility Plan?

The SUMP Concept

A SUMP is a strategic plan developed in a participatory and integrated way to meet people's and businesses' mobility needs in cities and to harmonise and integrate existing planning approaches.

What are the specific needs for MobiliseYourCity geographies?

- Need of increasing the technical capacities of local governments
- Opportunity to establish governance and institutional frameworks compatible with sustainability principles
- Chance to maintain low levels of private motorisation and a high modal share of walking
- Urgency to transform/regulate paratransit services which are the main, if not the only, mode of public transport in the Global South

MobiliseYourCity advocacy activities in Asia

Nonmotorised transport: changing cities with active mobility

The Role of walking and cycling in sustainable urban mobility

MobiliseYourCity Asia Regional Event 2023

4

Sustainable Urban Mobility Plans

SUMP

Adapting the concept to Asian cities by MobliseYourCity Asia Programme

What is MobiliseYourCity in Asia?

04.1

MobiliseYourCity Programme in Asia

Enhance ADB-AFD strategic partnership in sustainable urban mobility sector

A MoU signed in 2019 to jointly develop MYC in Asia to support increased ambition of project co-financing. Collaboration between AFD and ADB reconducted in 2023 for a MobiliseYourCity Asia Programme Phase 2.

Objectives of the MobiliseYourCity Partnership in Asia :

- **Develop** (or improve-complement) **Sustainable Urban Mobility Plans** (SUMPs)
- **Build capacities** through a knowledge platform, trainings, peer-to-peer advices…
- **Prepare priority projects** (pre-feasibility study, incl. conceptual or preliminary engineering design, emissions' assessment, gender action plans, etc.)
- **Implement pilot projects**

… Create a pipeline of ADB-AFD sustainable urban transport projects in the region

MobiliseYourCity Programme in Asia – Technical Offer

MobiliseYourCity's methodological offer

SUMP Toolkit

MobiliseYourCity SUMP Guidelines

SUMP Frequently Asked Questions

Topic Guide: Participatory processes in urban mobility planning

Topic Guide: Transport modelling for mobility planning

Topic Guide: Integrating land-use and urban mobility planning

Core indicators and monitoring framework

SUMP Model Terms of Reference

SUMP Annotated table of contents

Modelar y planificar la movilidad urbana en tiempos de crisis

Summaries and final reports

NUMP Toolkit

MobiliseYourCity NUMP Guidelines

NUMP Model Terms of Reference

GHG Emissions Calculator Toolkit

MobiliseYourCity Emissions Calculator

MobiliseYourCity Monitoring and Reporting Approach for GHG Emissions

User manual of the MobiliseYourCity Emissions calculator

Paratransit Toolkit

Understanding paratransit

Diagnose paratransit services

Reforming the paratransit sector

Contracting options for paratransit reform

Paratransit in Asia

Recommendations to Abidjan for paratransit reform

Paratransit case studies

Governance Toolkit

Understanding urban mobility governance

Diagnosing urban mobility governance

Enhancing urban mobility governance

Who pays what for urban mobility

Urban mobility governance case studies

Specific innovative offer

Linking Land-Use and Mobility Planning (Integration Mass Rapid Transit Systems)
Diagnosis, Measure selection, Concept Desing

Active Modes Introduction, Diagnostic, Financing, Concept Design

Technical Studies as outcome

Example of Technical Study:

- Physical Planning of Transit Interchanges in Ahmedabad (India)
- Preparation of a Mobility Improvement Plan along North-South Railway Station Corridor in Kochi (India)

CONSULTANCY SERVICE FOR PHYSICAL PLANNING OF TRANSIT INTERCHANGES IN AHMEDABAD (INDIA)

Task 3 : General guidelines and Concept Plan

Final Deliverable

AFD ARTELIA AREP urbz

MobiliseYourCity Asia – Refine the offer

Synthesis of ADB/AFD joint potential Technical Assistance area through MobiliseYourCity Asia

SUSTAINABLE URBAN MOBILITY PLANS (SUMPs)

- **Full SUMP development** (includes technical mobility and housing surveys; participative approach with milestone event as “mobilise days”; optional Concept Design for Priority Projects)
- **SUMP Component** (i.e. action plan with priorities; strategic planning – however SUMP Component can be elaborated only based on existing available, consistent, and verified mobility data)

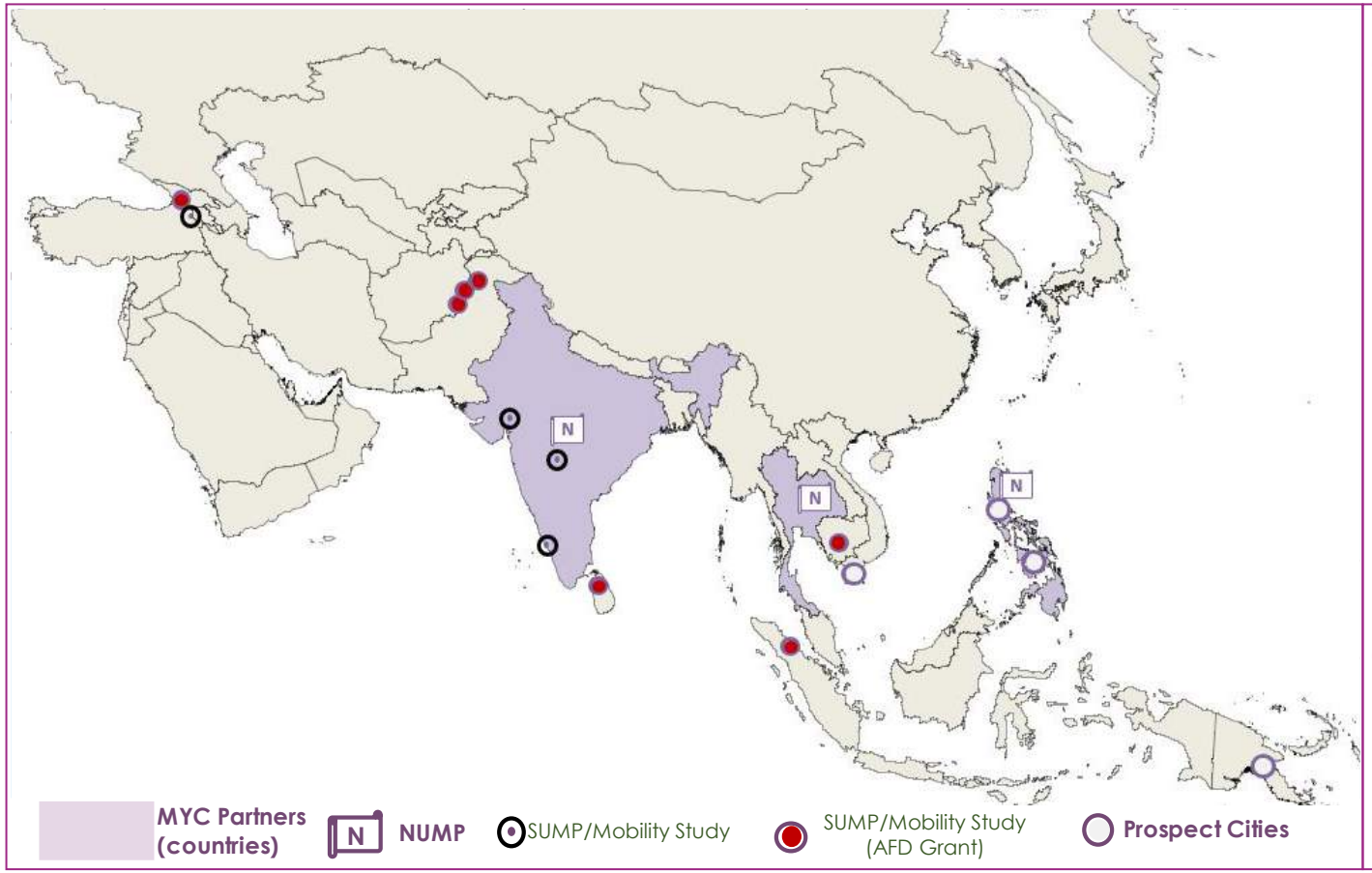
PROJECT PREPARATION STUDIES (PPSs)

- **Comprehensive Study Preparation Sustainable Mobility Project** (study focus on an identified priority project that fall into MobiliseYourCity approach)
- **Additional Surveys to engage an identified priority project** (based on city partner request and implementing partner needs to pursue mobility project development)

TAILORED CAPACITY DEVELOPMENT AND KNOWLEDGE DISSEMINATION (on SUMPs or Technical Urban Transport Solutions)

Mobilise Your City

MobiliseYourCity Partner Countries and Cities in Asia



AFD ADB

- Peshawar, Abbottabad, Mingora (*Pakistan*)–AFD & ADB Led
- Tbilisi (*Georgia*)– ADB & AFD Led
- Phnom Penh (*Cambodia*) –AFD & ADB Led
- Nagpur, Kochi, Ahmedabad (*India*)–AFD Led
- Kurunegala (*Sri Lanka*)–AFD Led
- Medan (*Indonesia*)–AFD Led
- Aizwal (*India*) – ADB & AFD Led (*starting*)
- Davao City (the Philippines) (*under preparation*)

AFD

- India

giz

- Thailand
- Philippines

Countries members:

- Philippines
- Sri Lanka
- Thailand
- India

City members:

- Kurunegala (*Sri Lanka*)
- Tbilisi (*Georgia*)
- Medan Metro. Area (*Indonesia*)
- Nagpur, Kochi, Ahmedabad, Aizwal (*India*)
- Peshawar, Abbottabad, Mingora (*Pakistan*)
- Yerevan (*Armenia*)
- Phnom Penh (*Cambodia*)

ZOOM: service

MOBILITY PLANNING

Supporting implementation and investment ready plans for inclusive and low-carbon transport

CAPACITY BUILDING

Equipping practitioners with tested and scalable solutions

ADVOCACY

Encouraging institutions and individuals to embrace and resource sustainable mobility

IMPLEMENTATION SUPPORT

Empowering members to bridge planning with implementation for green and just cities

Your City

MobiliseYourCity Asia Regional Events in 2023 – Community of Practice

MobiliseYourCity Regional Event, ADB HQ

- 3 days-event in Manila
- More than 60 participants (plenary sessions and workshops)
- Innovative topics: SUMP, NMT, Land-Use / Mobility planning integration, Finance, Paratransit, Urban Mobility Governance

Stakeholder Consultation Seminar in Phnom Penh (Cambodia)

- 1 day event with high level stakeholders + local consultation mission
- 70 participants (including other international agencies)
- Topic: Adapting and Upgrading the Urban Transport Master Plan; NMT and Mass Rapid Transit Corridor (BRT)

MobiliseYourCity is Promoting Sustainable Urban Mobility Plans (SUMPs) in the Region

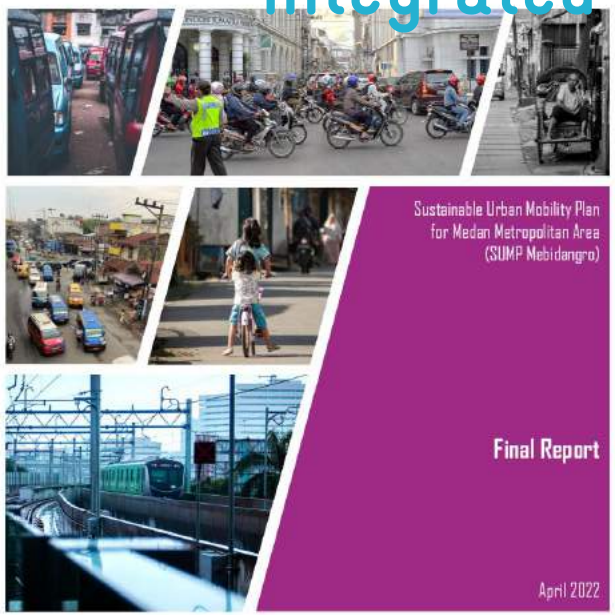
04.2

What is a SUMP ?

All transport modes developped in an integrated manner

Stakeholders engagement and citizens participation

Monitoring and evaluation



User-oriented approach

Objectives in favor of **climate change mitigation and adaptation**

Cross sectoral cooperation

Use of the innovation and technologies' potential

Long term vision

Functional urban area

a strategic plan developed in a participatory and integrated way

Mobilise Your City

Why SUMP Guidelines ?

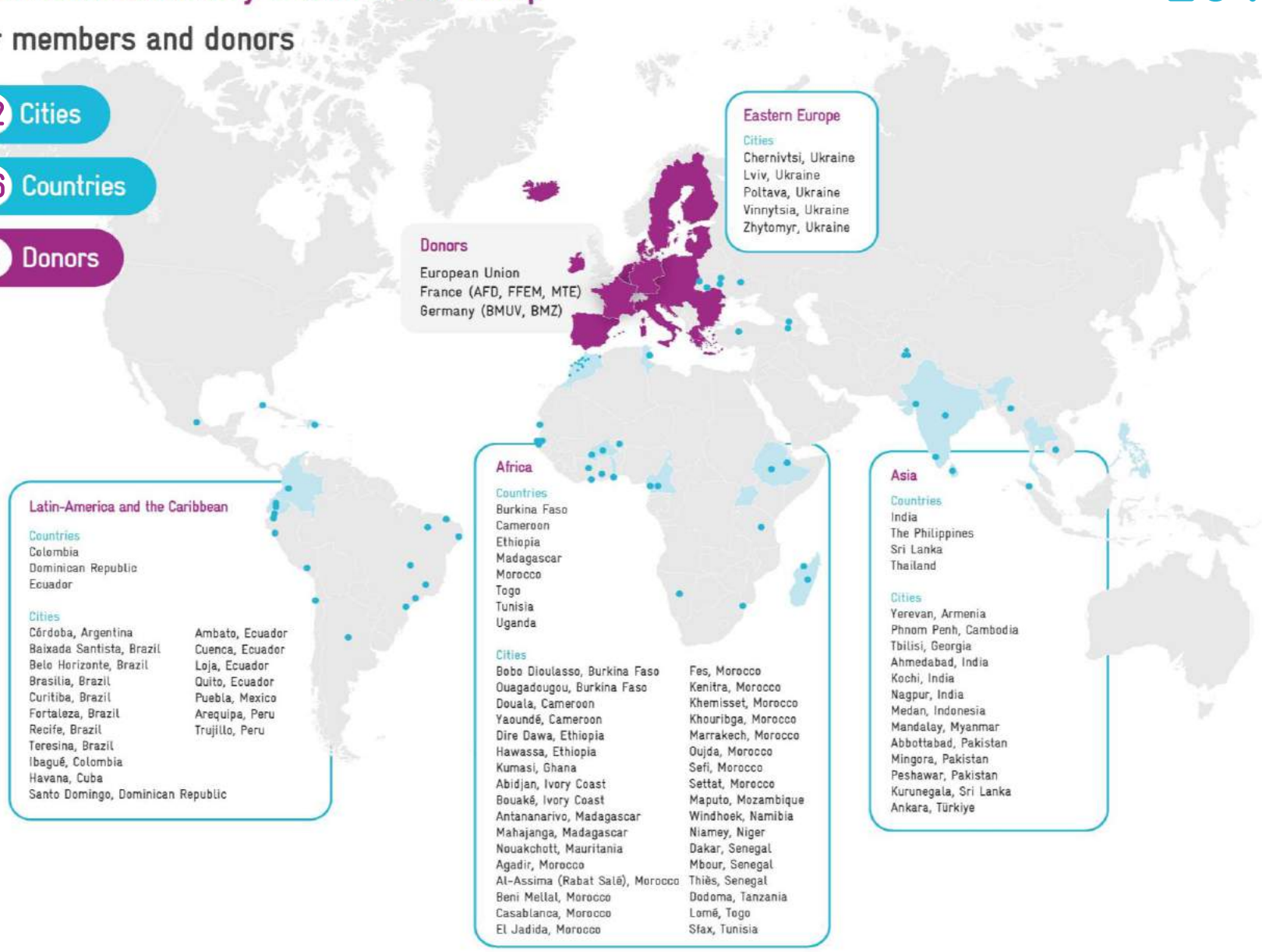
The MobiliseYourCity Global Partnership

Our members and donors

72 Cities

16 Countries

6 Donors



First SUMPs launched in 2018...

...20 completed SUMPs

11 SUMPs ongoing

Opportunity for sharing feedback on each phase of the process, until implementation

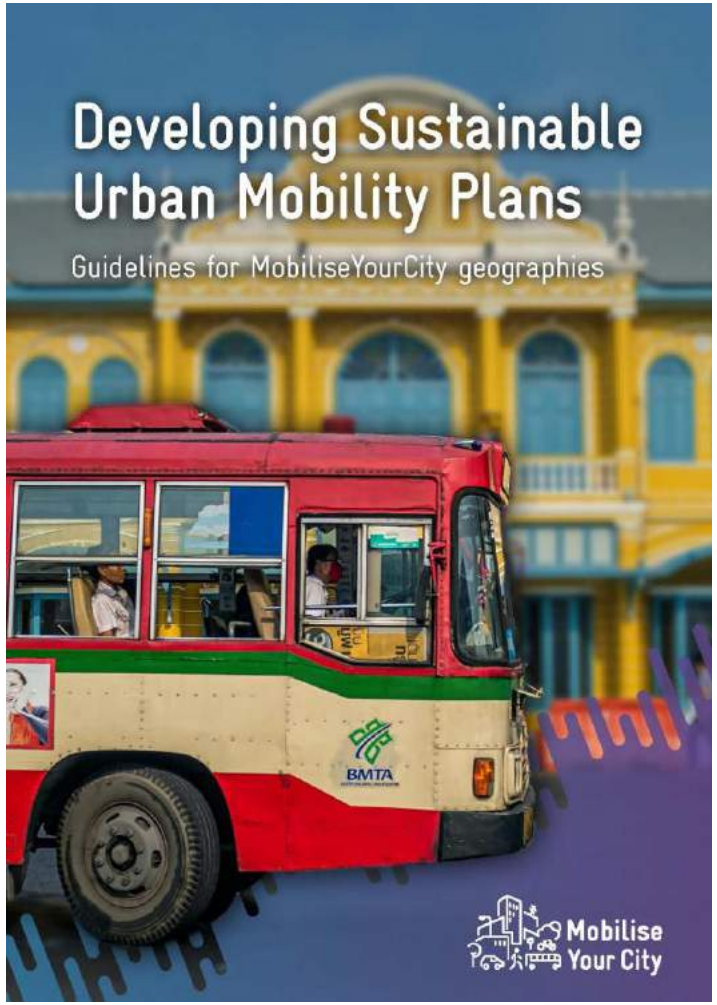
Mobilise Your City

Why SUMP Guidelines ?

From...

A document well aligned with European guidelines

...to



Although suited for the global south context

Taking in consideration the context: Predominance of paratransit, limited public capacities and financial resources, lack of planning culture

Mobilise Your City

Why SUMP Guidelines ?

Necessity to address the "how to"

Cities from the global south may feel unready or limited in their capacity to handle such intensive and multidimensional project

Change of paradigm compared to traditional transport planning

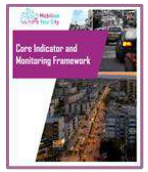
CHANGING TRANSPORT
Facilitating climate actions in mobility


NUMP Toolkit


SUMP Toolkit

SUMP Annotated Table of Contents

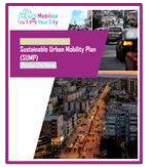
Core indicator and monitoring framework



Monitoring and Reporting approach for GHG emissions

SUMP Model Terms of Reference

NUMP Model Terms of Reference



Understanding paratransit

SUMP FAQs

NUMP Guidelines

Reforming paratransit

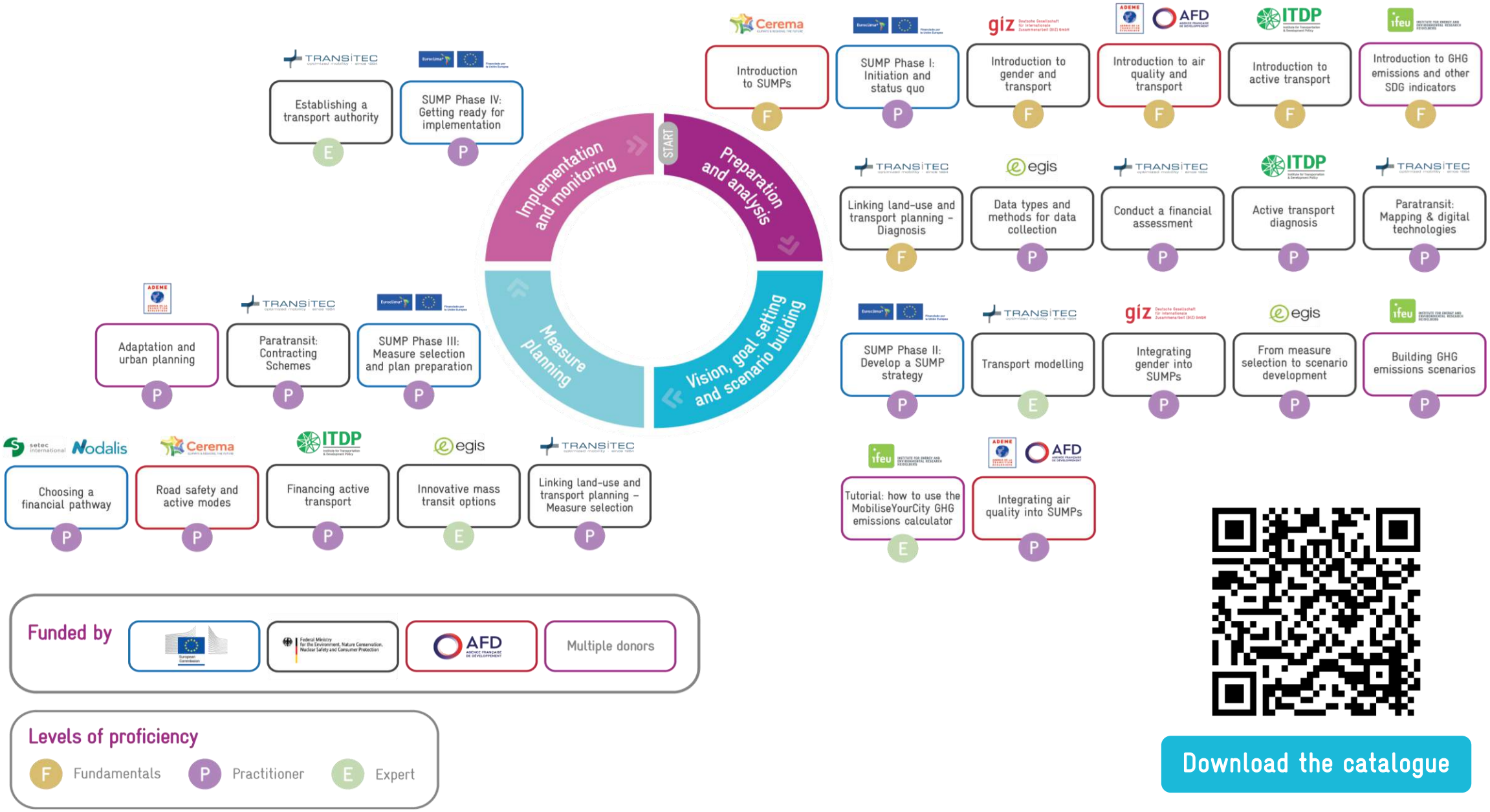
Driving change: Reforming urban bus services


Emissions Calculator

Going electric: A pathway to zero-emission buses

Mobilise Your City

SUMP - MobiliseYourCity's training materials



Download the catalogue

Why SUMP Guidelines ?

Opportunity to share good practices and strengthen the communities of practice

Mobilise Your City

How a SUMP is structured?

A glimpse of methodology

04.3

The SUMP cycle

Overview of the decision-maker

Step 0: Perform a readiness assessment

Step 1: Set up working structures

Who should get involved?

Step 2: Determine the planning framework

What is our planning context?

Step 3: Analyse the mobility situation

What are our main problems and opportunity?

Step 4: Build and jointly assess scenarios

What are our options for the future?

Step 5: Develop vision and objectives with stakeholders

What kind of city do we want?

Step 6: Set indicators and targets

How do we qualify our criteria for success?

Step 7: Select measure packages with stakeholders

What do we do concretely?

Step 8: Agree on actions

What does it take? Who shall be in charge?

Step 9: Prepare for adoption and financing

Are we ready to move forward with implementation?

Step 10: Manage implementation

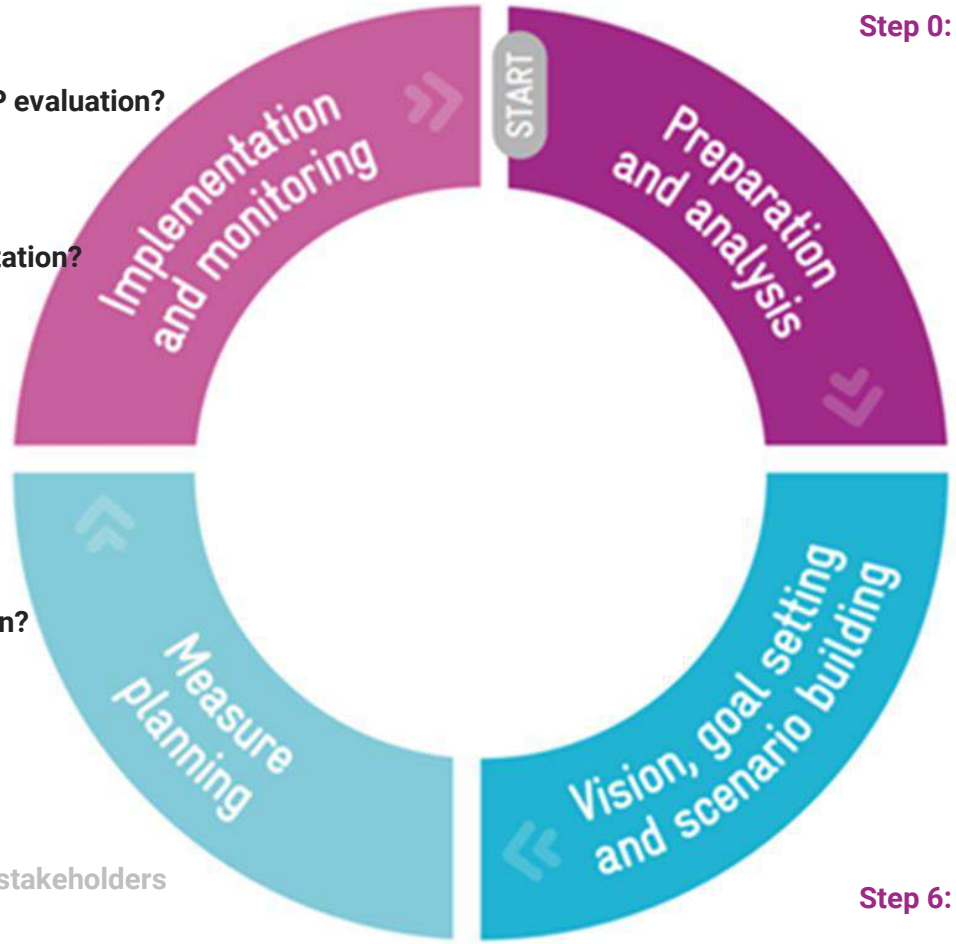
How can we manage the implementation of a comprehensive plan over the long-term?

Step 11: Monitor, adapt and communicate

How are we doing with the SUMP implementation?

Step 12: Review and learn lessons

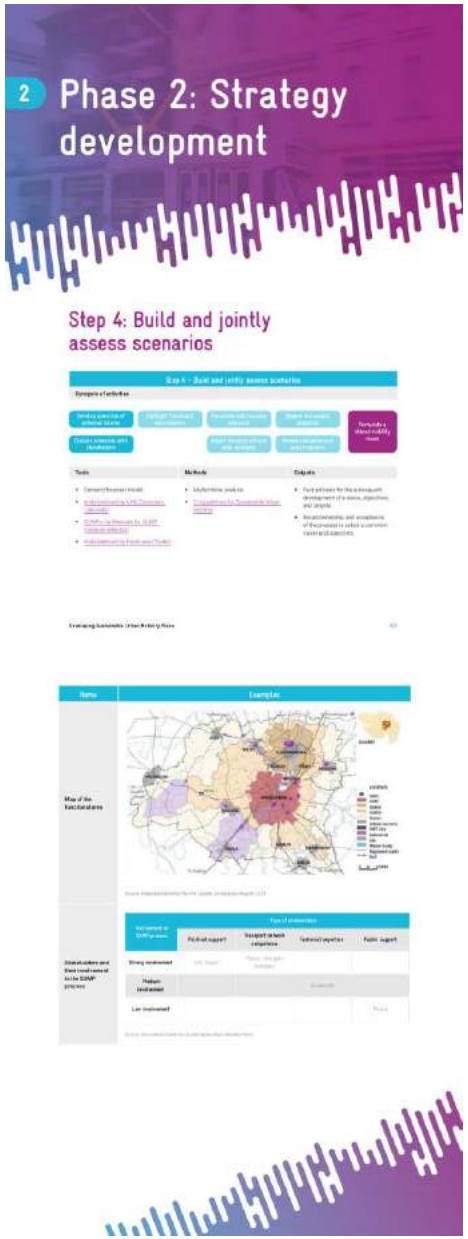
What have we learned from the SUMP evaluation?

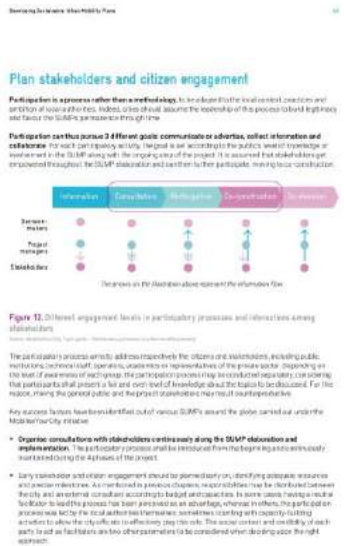


The SUMP cycle – 4 phases and 13 steps

Mobilise Your City

A recap of main phases and steps, with related activities, tools and outputs





Illustrations and canvas from other SUMPs

Key messages based on **lessons learned from other Cities** that has been engaged into a SUMP development process

Concrete examples or best practices experienced by partner Cities around the world

Phase 1 – Preparation and analysis

What are our resources? How to get ready?

Who should get involved?

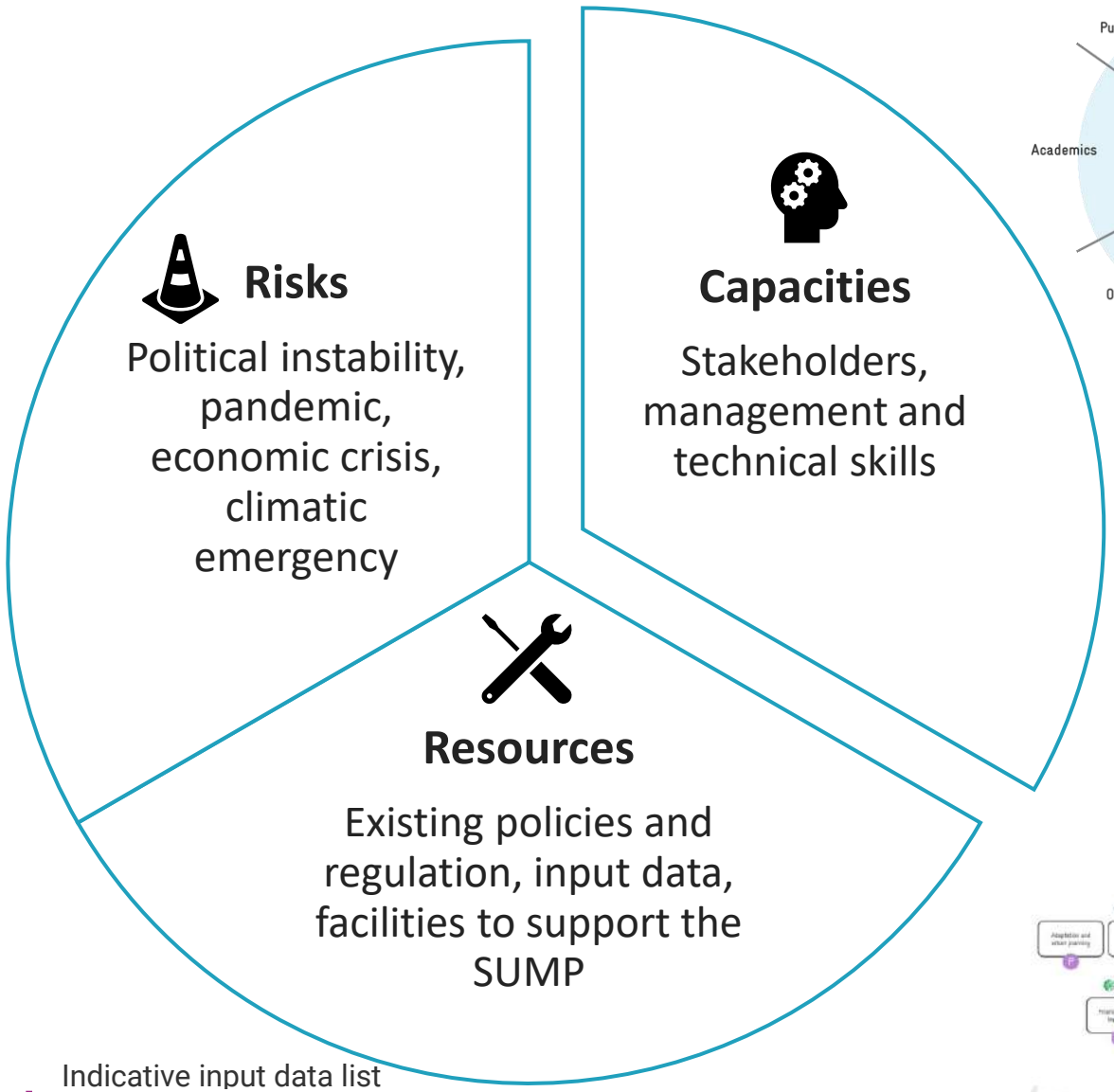
What is our planning context?

What are our main problems and opportunities?

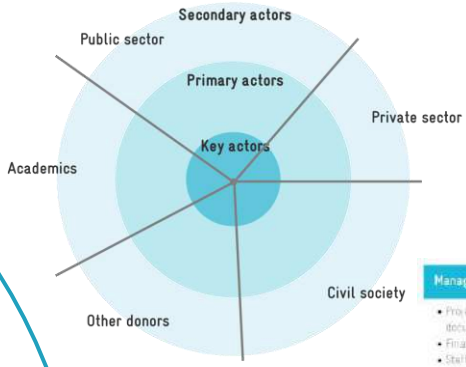
Mobilise Your City

Step 0 – Perform a readiness assessment

Risk matrix : consider the electoral cycle, the vulnerability of human activities and mobility to pandemics, purchasing power and price volatility, the nature and criticality of climate risks.



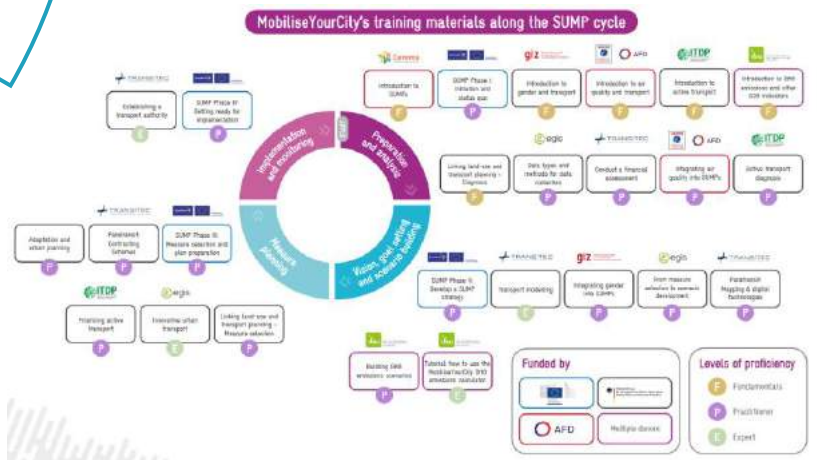
Indicative input data list



Stakeholders mapping

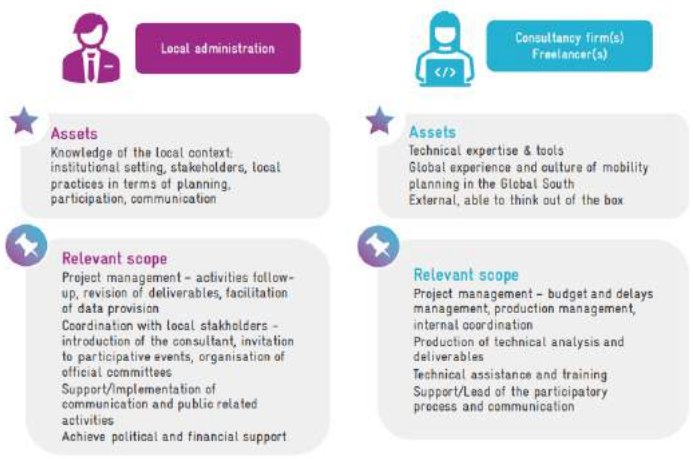
Management and technical skills checklist

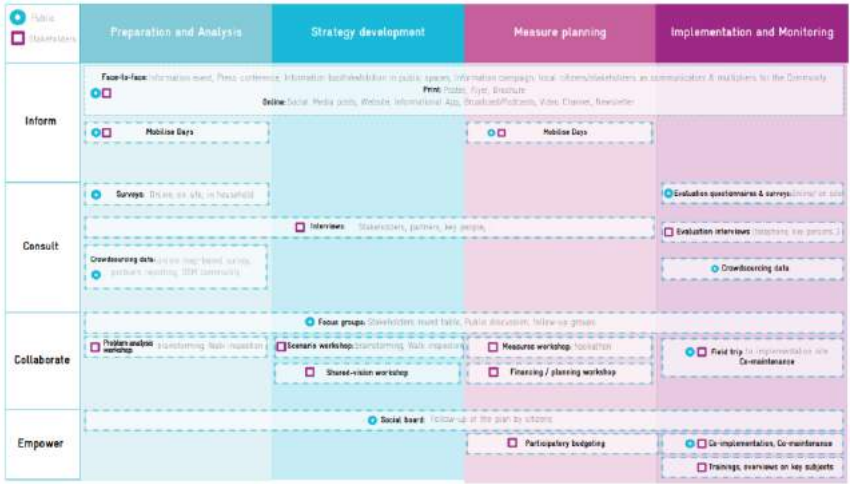
Options for building capacities



Step 1 – Set up working structures

Who should get involved?





If the City decides to seek external support, the TOR shall **specify local practices, actual needs and City resources available**, considering the capacities of the administration in charge

Build-up a team that gather a **large variety of profiles,** encouraging connection with other departments

Identify a **political champion – political support – and a technical champion** – follow-up and liaison with local partners

Organize **consultations with stakeholders** continuously along the SUMP cycle

Reach out to all kind of publics, not only connected ones

Ensure that the results of the participatory process are highlighted and considered in the SUMP

Step 2 – Determine planning framework

What is our planning context?

Phases and Steps	Urban concerns	Environment concerns	Social concerns
Phase I: Preparation and analysis			
Step 0: Perform a readiness assessment **Step 1: Set up working structures** **Step 2: Determine the planning framework** **Step 3: Analyse the mobility situation**	• Collection of socio-economic data, administrative boundaries land use • Analysis of urban structure, trips generators and major urban projects, developments	• Collection of statistics about the fleet, motorisation, and fuel consumption • Experience with an alternative source of energy • Estimation of the GHG emissions of the transport sector	• Collection of statistics about incomes • Identification of deprived areas • Analysis of accessibility and mobility conditions in deprived areas • Affordability of the transport system

Objectives of Phase 2, Strategy development and Phase 3, Measure planning

Assess the social impact and inclusive character of mobility policy

Develop a robust and detailed financial plan

Have a clear understanding of modal share and a fair assessment of mode incidence on behaviours, possibly introducing new transport modes

Evaluate MRT projects accurately – as for demand, costs, impacts, etc.

Consider a new fare policy as part of the SUMP

Incidence on workplan to be anticipated in Step 2, Determine planning framework

Design the survey program in order to assess main resources and expenses of households

Provide objective information accounting for direct and indirect beneficiaries of the transport system (e.g. origin and destination of trips, socioeconomic profile of passengers, etc.)

Ensure that the modal segmentation is adequate and well understood by respondants, collect qualitative information regarding mode attractivity

Design the zoning and survey sampling according to the foreseen rank/station layout

Assess willingness to pay, according to the level of ressources

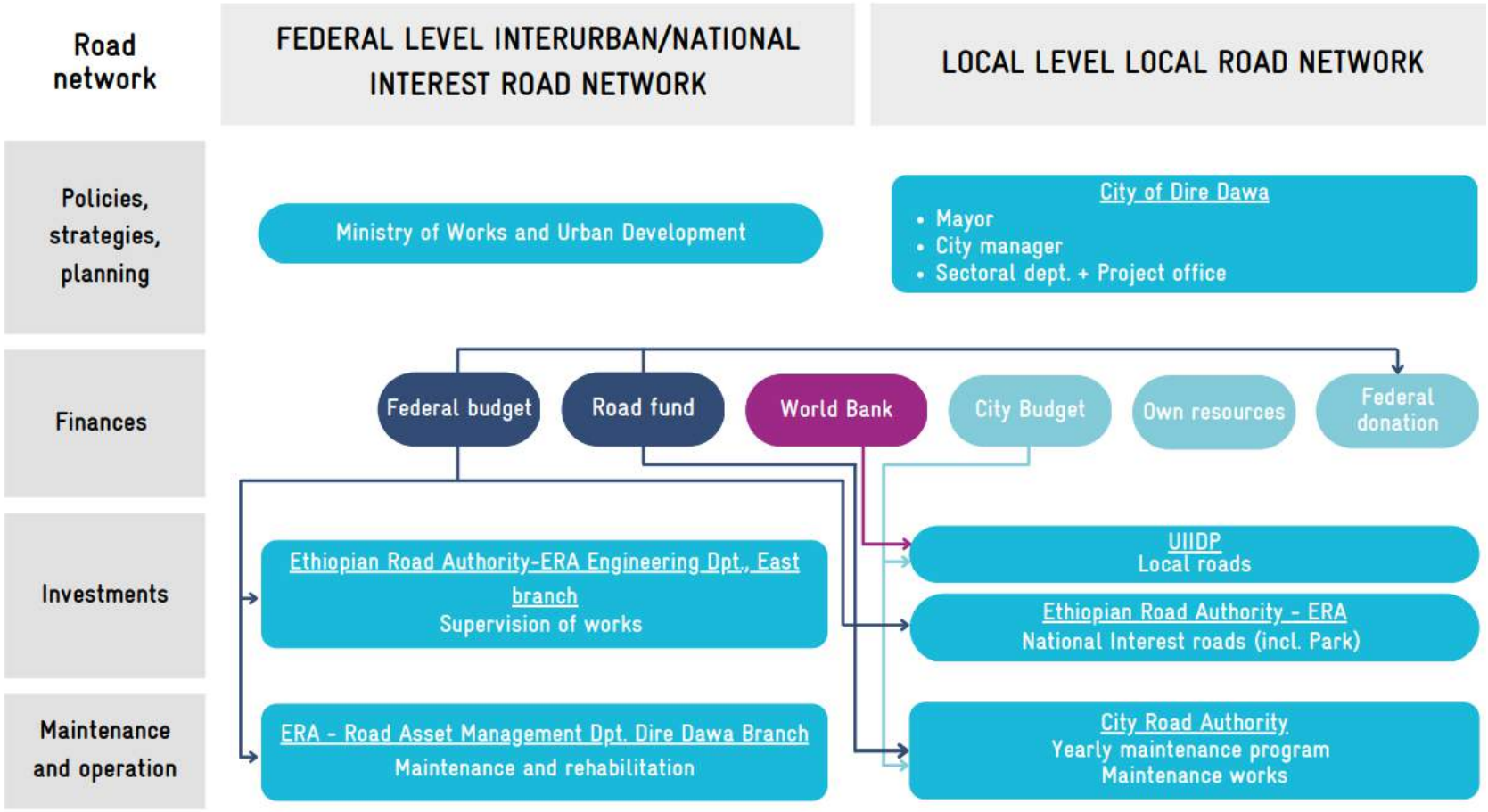
Fully embed the SUMP into development and implementation schedules of other existing policies and strategies

Objectives and needs for a demand forecast model shall be anticipated, according to the local context and priorities

Formalize the participation and capacity building of the technical committee all along the workplan

Step 3 – Analyse mobility situation

What are our main problems and opportunities?



Conduct a financial assessment to get a clear and comprehensive overview of financing and funding mechanisms of the transport sector

Highlight mobility issues in a comprehensive manner, considering urban dynamics, social exclusion aspects and institutional framework

Share and consolidate conclusions jointly with stakeholders, for they will later support the identification of challenges to be addressed by the SUMP

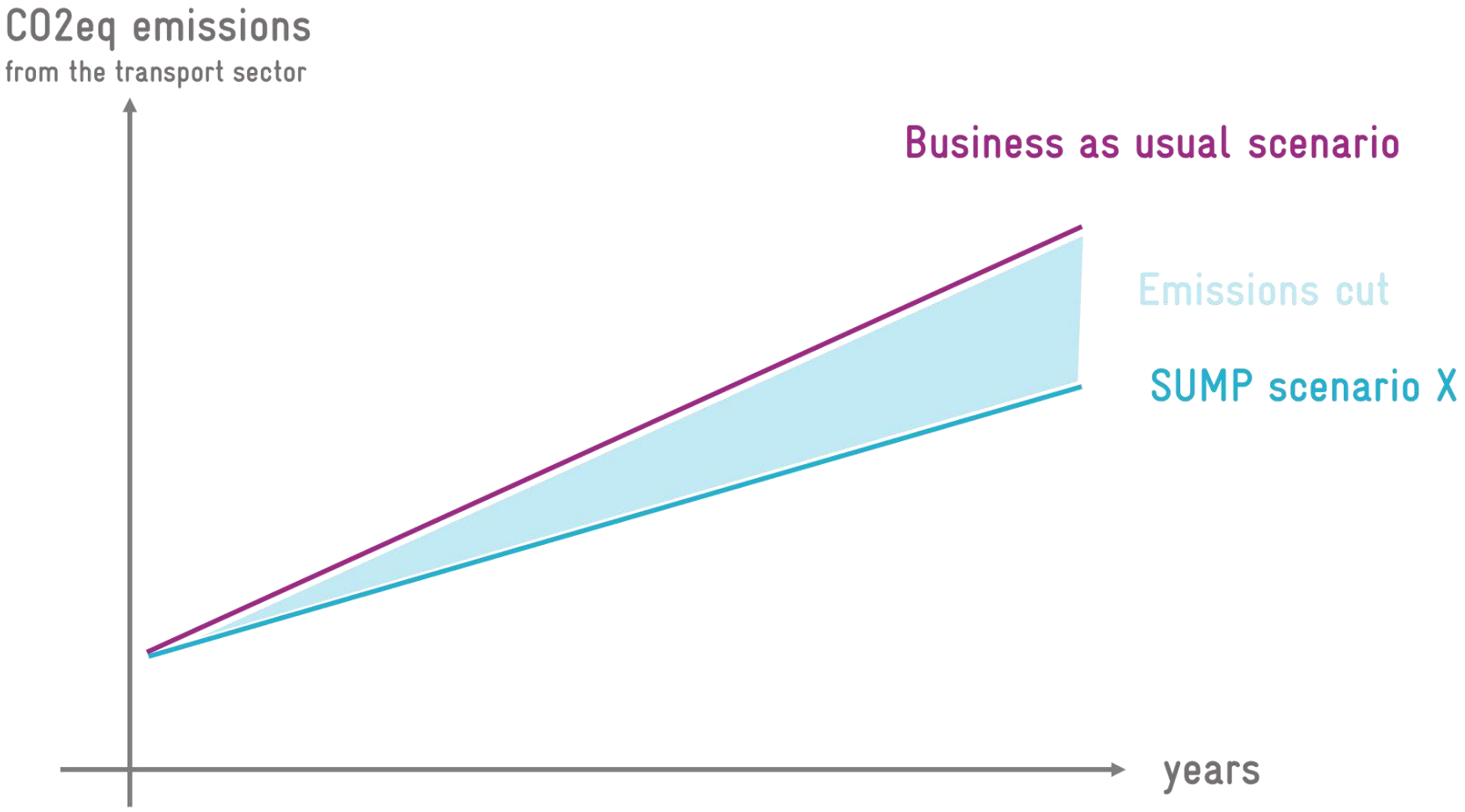
Phase 2 – Vision, goal setting and scenario building

What are our options for the future?

What kind of city do we want?

How to qualify our criteria for success?

Step 4 – Build and jointly assess scenarios



Get inspired from other cities to appreciate different strategies considered to address same mobility issues as yours

Ensure that considered scenarios bring positive environmental and social impacts, when compared to the BAU scenario.

Step 5 – Develop vision and objectives with stakeholders

Step 6 – Set indicators and targets

What kind of city do we want? How to qualify our criteria for success?

Make sure to connect local issues and population concerns with sustainable goals when developing the vision

Reduce and rationalize the use of car

Facilitate metropolitan trips

Provide accessibility to the mobility system and metropolitan opportunities to all citizens

Make walking and cycling safe and attractive

Enhance mobility within districts thanks to a meshed network

Provide high-quality and efficient public transports

Value the natural assets and improve the quality of the urban environment

Adapt the organizational and financial frameworks to implement a metropolitan sustainable mobility system

Set objectives that are aligned with both sustainable mobility values and local concerns.

Phase 3 –
Measure planning

Are we ready to move forward implementation?

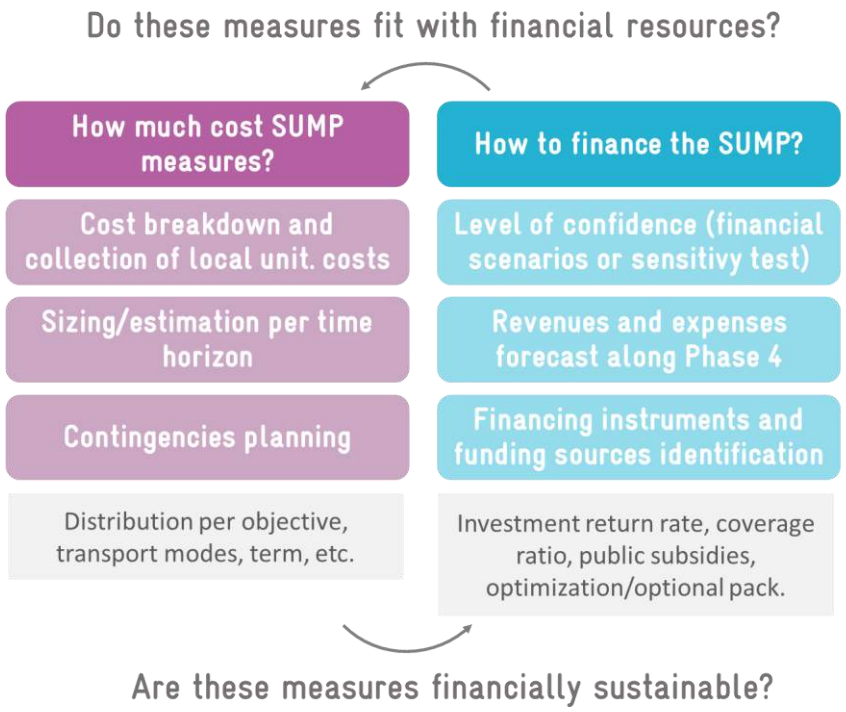
What will it take? Who will be in charge?

What will we do concretely?

Step 7 – Select measure packages with stakeholders

Step 8 – Agree actions and responsibilities

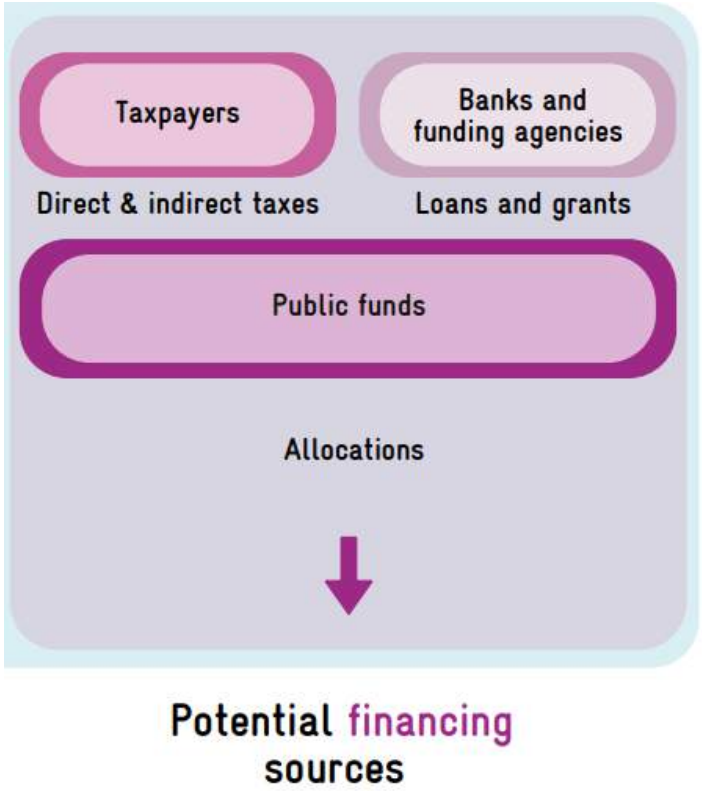
What will we do concretely?



The action plan shall be tailored to funding capacities

Consider affordability as an objective while evaluating the financial viability of the SUMP

Seek national and international support to increase your funding capacities.



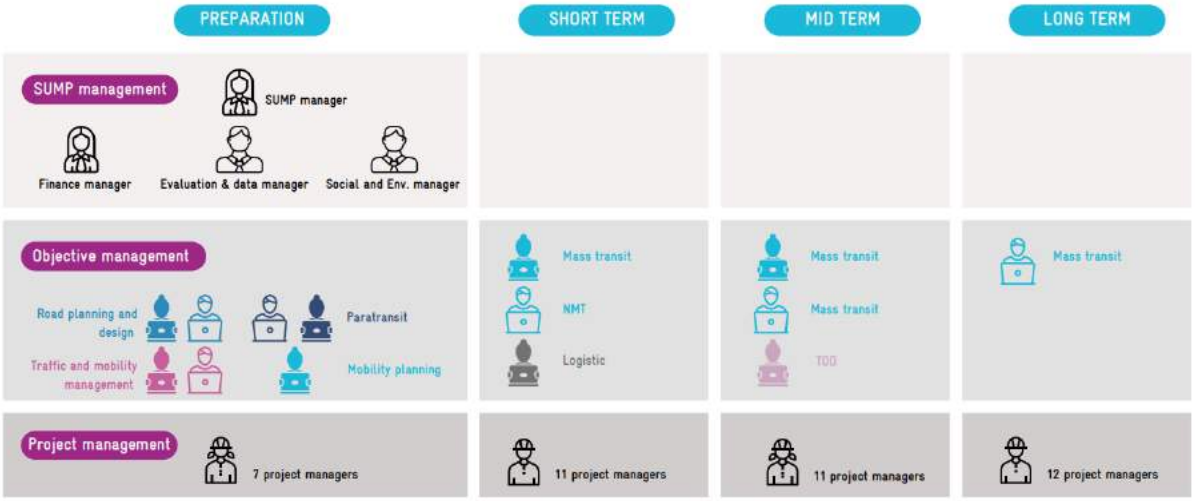
Potential financing sources

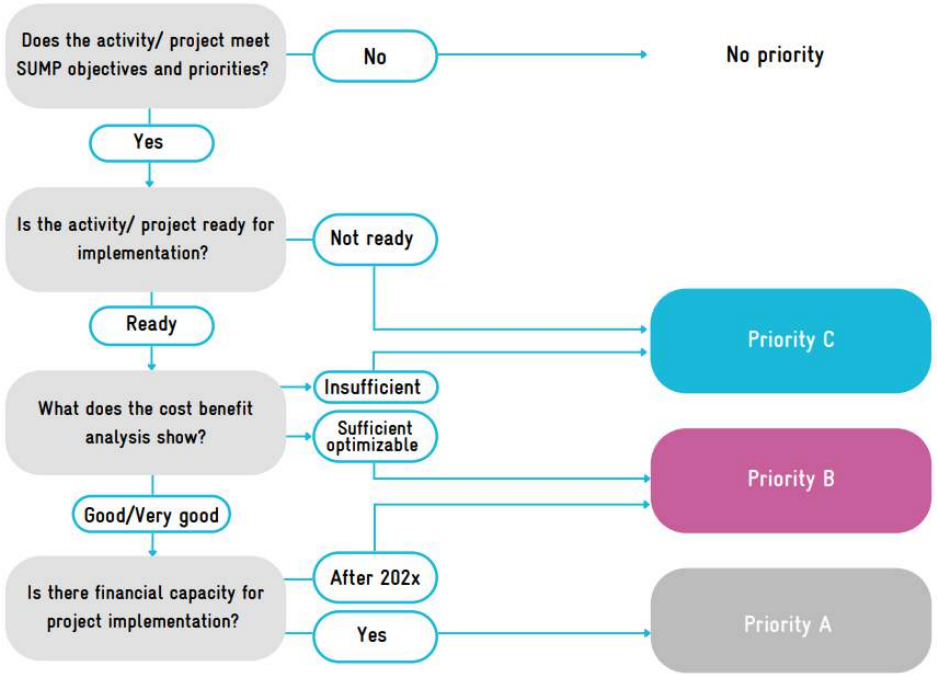
Step 8 – Agree actions and responsibilities

Step 9 – Prepare for adoption and financing

What will it take? Who will be in charge?

Are we ready to move forward implementation?





Have a focus on required human resources to implement, supervise and monitor the SUMP measures

Formulate SMART indicators that can support decision-making and SUMP adjustment along implementation

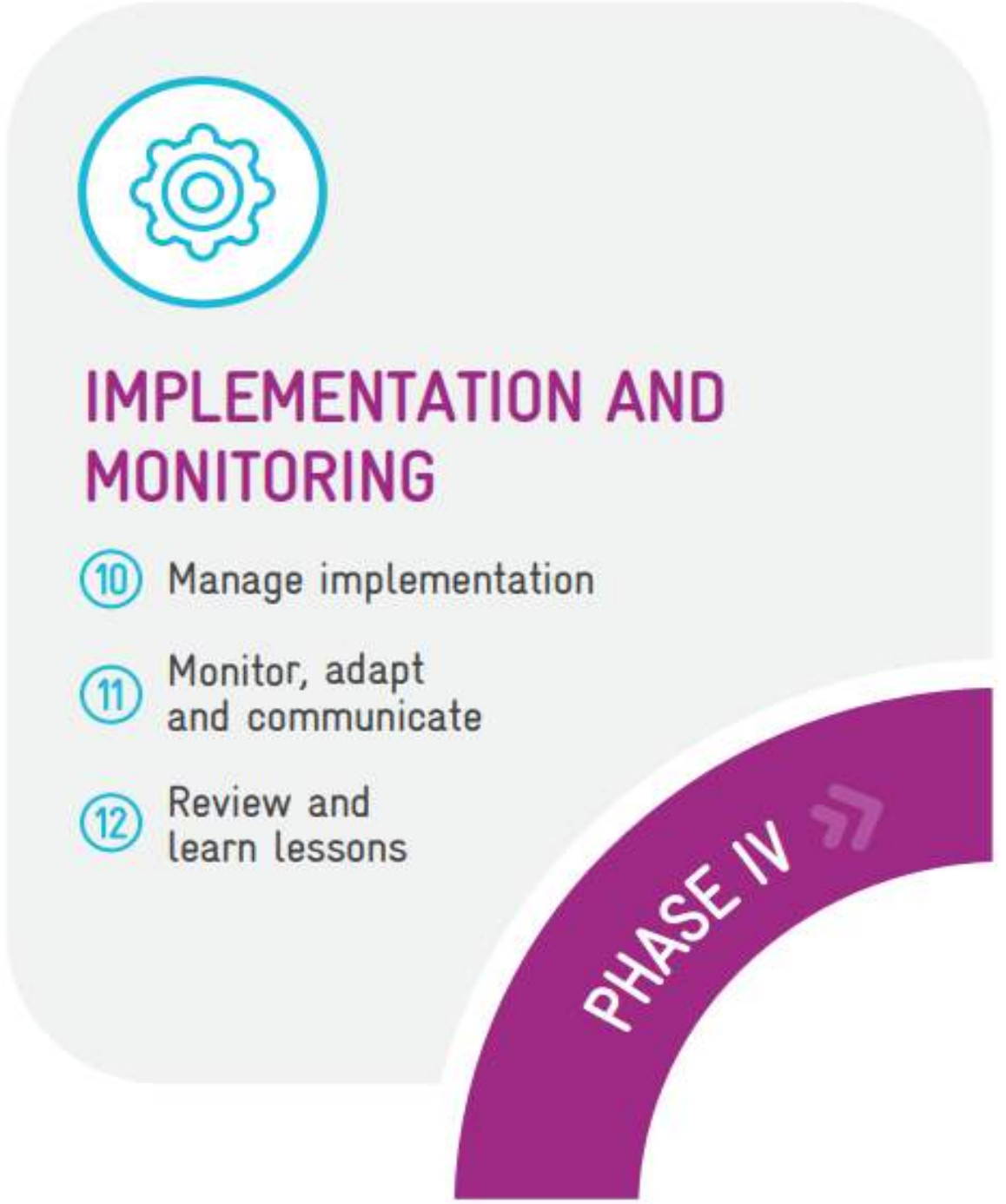
Make monitoring and evaluation arrangements an integral part of the action plan

Phase 4 –
Implementation and monitoring

What have we learned from the SUMP evaluation?

How are we doing with the SUMP implementation?

How can we manage the implementation of a comprehensive plan over the long term?



Step 10 – Manage implementation

Step 11 – Monitor, adapt and communicate

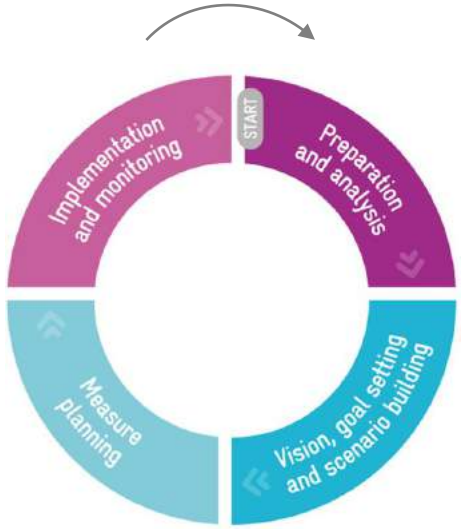
Step 12 – Review and learn lessons

How can we manage the implementation of a comprehensive plan over the long term?

How are we doing with the SUMP implementation? What have we learned from the SUMP evaluation?

Continuously encourage political buy-in through regular meetings, reviews and consultation

Communicate on a regular basis achievements and lessons learned



Evaluate the successes and failures of the SUMP and capitalize enough to feed the next SUMP

A SUMP by the example?

The case of Mebidangro Indonesia

04.4

The SUMP process ends with the elaboration of an Action Plan

Nov 2020 | Dec 2020 | Jan 2021 | Feb 2021 | Mar 2021 | Apr 2021 | May 2021 | Jun 2021 | Jul 2021 | Aug 2021 | Sep 2021 | Oct 2021 | Nov 2021 | Dec 2021

COMPONENT 1 Inception

COMPONENT 2 Diagnosis of Urban Mobility

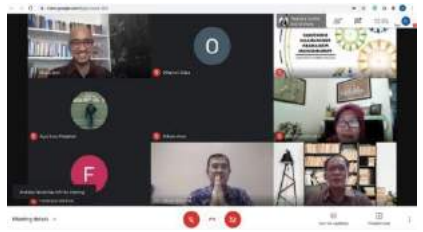
COMPONENT 3 Definition of vision and objectives into scenarios

COMPONENT 4 Action Plan

SUMP Action plan

Oct 2020
Governor kick-off

Steering committee



Dec-Feb 2021
Stakeholders engagement
- 4 focus group discussions: operators, citizens, vulnerable groups, authorities
- Gender issues workshops

Technical committee

May 2021
Urban mobility diagnosis

Steering committee

Sep 2021
Capacity building Trainings on Modelling, Urban transport innovation, MRV x2

Jun 2021
Goal setting workshop

Jul 2021
Scenario identification & measures

Technical committee

Sep-Nov 2021
Scenario and measures construction
Important modelling works

Technical committee

Dec-Feb 2021
Data collection
- 13.000+ household interviews
- Onboard and roadside interviews
- Traffic counting on roads and junctions
- Secondary data collection

Technical committee

Oct 2021
Selection of scenario and detailing of measures to translate into a feasible SUMP action plan

Technical committee

Dec 2021
Review 2

Dec 2021
Review 1

Technical committees

Feb 2022
Final presentation

Steering committee

Continuous participatory process and capacity building adapted to Mebidangro (4 trainings)

Preparation of the observatory of urban mobility adapted to Mebidangro (MRV, with 2 guidance sessions)

The SUMP for Medan Metropolitan Area – A synthesis

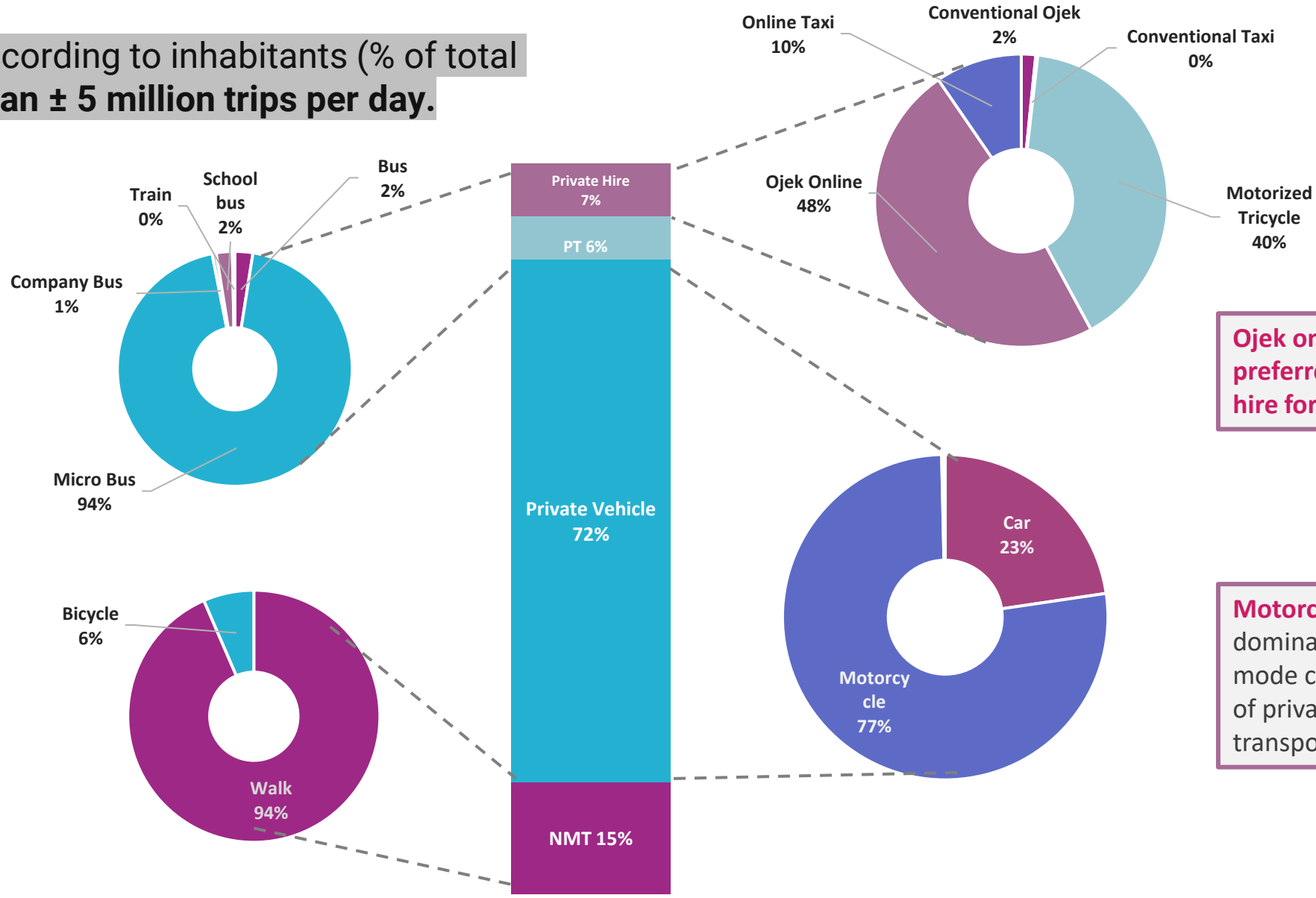
Mobilise Your City

Recap' Phase 1 – Diagnosic ➔ Understanding the mobility

Choice of mode according to inhabitants (% of total trips) **over more than ± 5 million trips per day.**

Minibus currently dominates public transport choices while having **low capacities and low comfort**, but great **accessibility**.

The low percentage of bicycle reflecting the **lack of NMT infrastructure and sidewalks**.



Ojek online is the **preferred private hire for households.**

Motorcycle is dominating the mode choice of private vehicle transportation.

Recap' Phase 2 – Vision, goal and scenarios ➔ Selection of measures

Mebidangro SUMP action plan is composed of 41 measures following 6 different themes

PUBLIC TRANSPORT
improved and new systems
9 actions

- **BRT lines**
- **Rapid rail lines**
- Increase service levels of existing rail
- Bus lines for school
- Angkot optimization
- Rejuvenation of angkot fleets
- Waterbus services
- Public transport campaign
- Increase quality of existing buses

URBAN PLANNING
& non motorized transport
7 actions

- Periodical closure of roads
- **Mixed-use zones in secondary urban centers**
- Comfortable and safe sidewalks
- **Development of safe bicycle lanes**
- **Law to restrict urban sprawl**
- Transit Oriented Development & Land Value Capture framework

ROAD NETWORK
for private vehicles
9 actions

- **Enhance road link Medan – Berastagi**
- Circular roads as planned in RTRW
- **Standardized road signage**
- Traffic calming measures at blackspots
- **Dedicated Park and Ride at transit hubs**
- Limit freight vehicles operating hours
- **Key multimodal hubs**
- Quality road network throughout Mebidangro

DIGITALIZATION
4 actions

- Mobility as a Service
- Fare intermodality
- Passenger information
- Traffic monitoring system

GOVERNANCE
5 actions

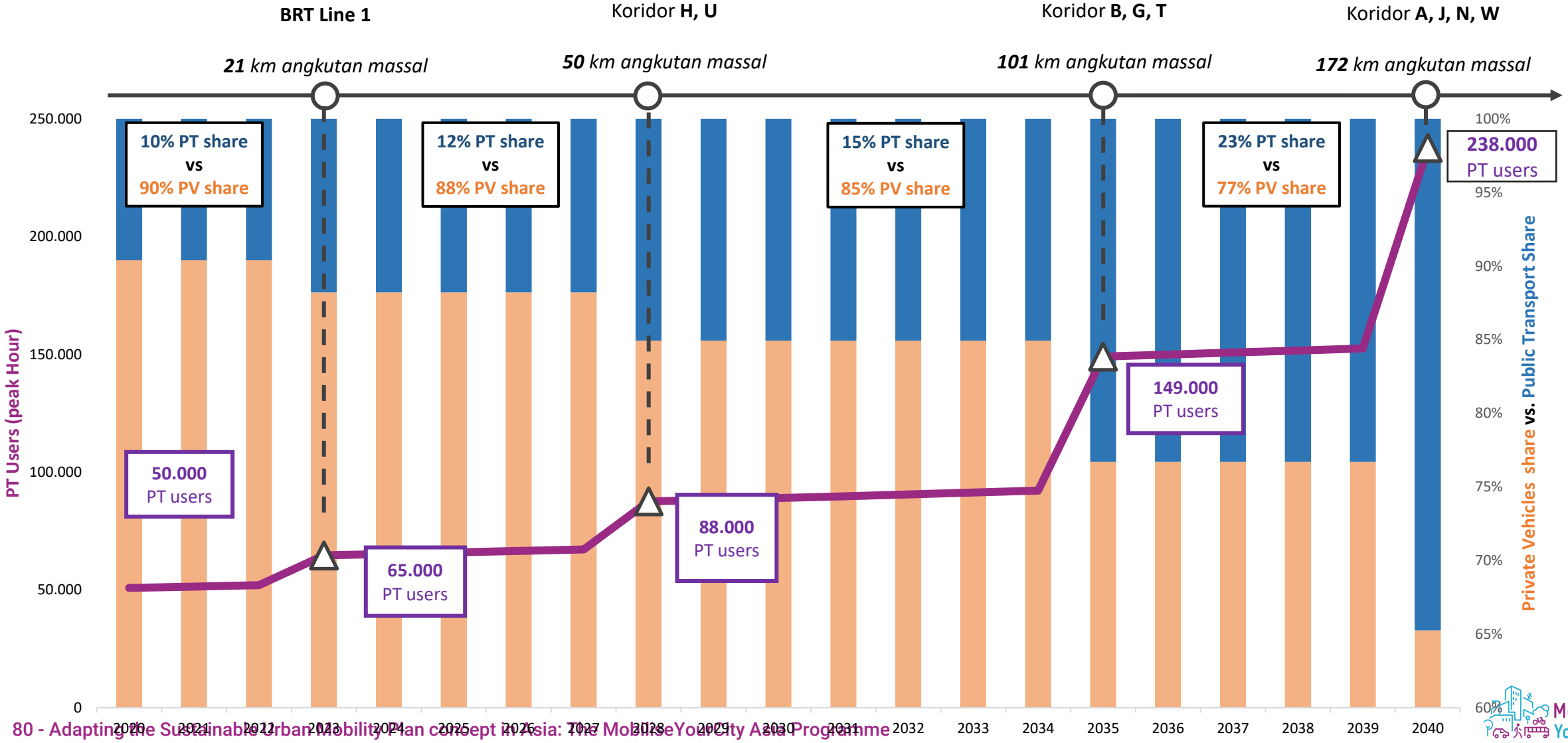
- **Transit authority**
- Corporate tax on mobility
- Technical assistance
- Separate track and train operators
- **Minibus reform**

ENVIRONMENT
7 actions

- **Incentives to reduce fuel consumption**
- Tax on motorized vehicles using urban roads
- **Cleaner and renewable energies for road public transportation & private vehicles**
- Renewable energy for rail
- Air quality stations
- **Environmental issues campaigns**

Recap' Phase 3 – Measure planning ➔ Forecast potential impacts

Public transport evolution and development of the network



Key figures of the action plan for Mebidangro Urban Area

41 actions proposed for mobility

to support mobility development in short, medium and long term on 6 main directions (urban, roads, public transport, digital, environment and governance).

80 km of integrated mass transit by 2035

with modern technologies to support mobility along main axes and provide affordable transport to people of Mebidangro. This figure reaches 152 km in 2040.

x5 people to access formal transit

By 2035, 15% of the area inhabitants will live within 750 meters of formal transit stops and the accessibility will be increased from 3,8% in 2020 (excl. angkots).

-23% congestion on the roads

A drop of the congestion of almost a quarter (vehicle hours) by 2035, thanks to a modal shift to public transport of more than 20%.

-20% GHG emissions from mobility

The action plan allows cutting mobility-related emissions of GHG from the area by a fifth by allowing new mobility to its inhabitants.

± IDR 24 T 15-year plan for mobility

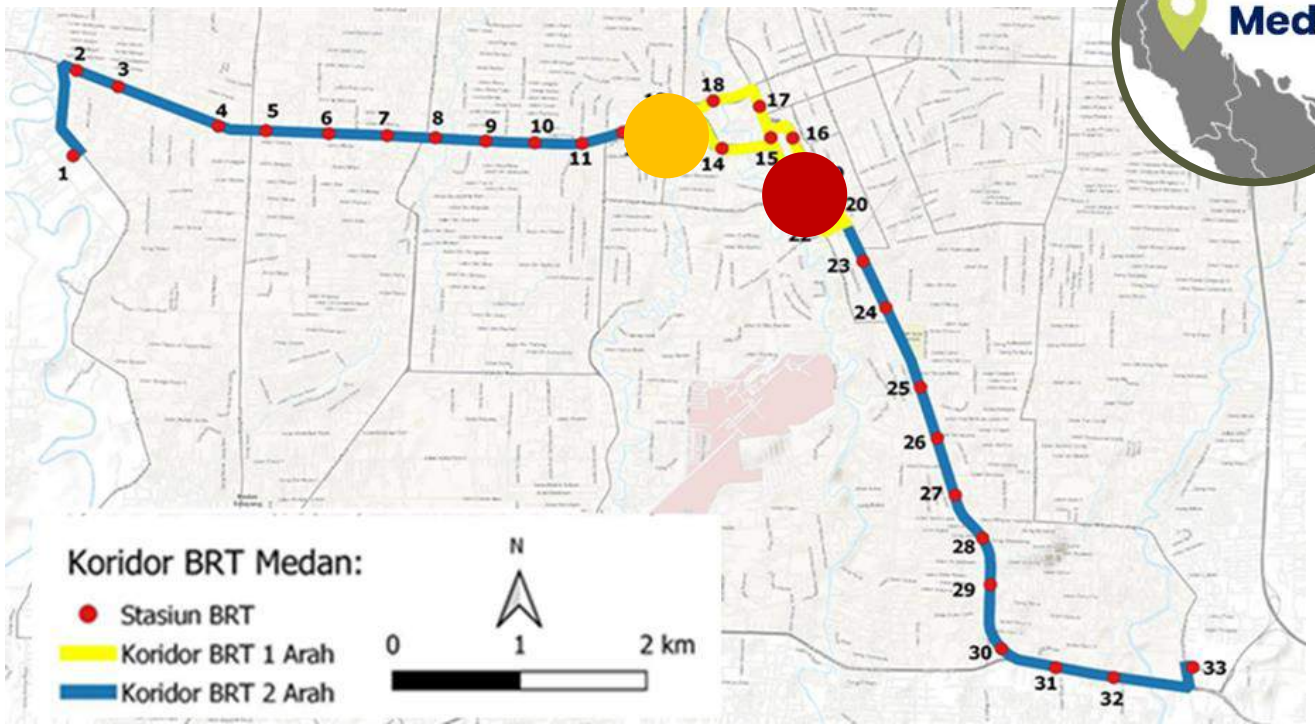
The staged investment plan of priority measures spreads on the long term for mass transit, NMT but also traffic calming and safety of the roads. The entire mass transit network needs IDR 56 T.

Figures to be slightly updated upon refinement of calculations.

Mobilise Your City

STEP 4 SHORT TERM IMPLEMENTATION 2024

Mebidang BRT (dedicated corridor)



Koridor : 21 km Jalur Khusus
Halte : 33 Halte (On Corridor/Dedicated Lane)
Rute : 17 rute layanan langsung (direct service)
Jumlah : 515 unit bus
Jangkauan : Kota Medan, Kota Binjai, Kabupaten Deli Serdang

Rencana Pengembangan Kawasan Low Emission Zone (LEZ)

Rencana Pengembangan TOD

5

Questions, Feedback and Farewell?

6

Online Poll

Thank you for your attention!