



Need of Recalibrating CMPs in India

Shalini Sinha, Phd

Executive Director, Center for Excellence in Urban
Transport, CRDF

Associate Professor, Faculty of Planning

CEPT University, Ahmedabad



Presentation Structure



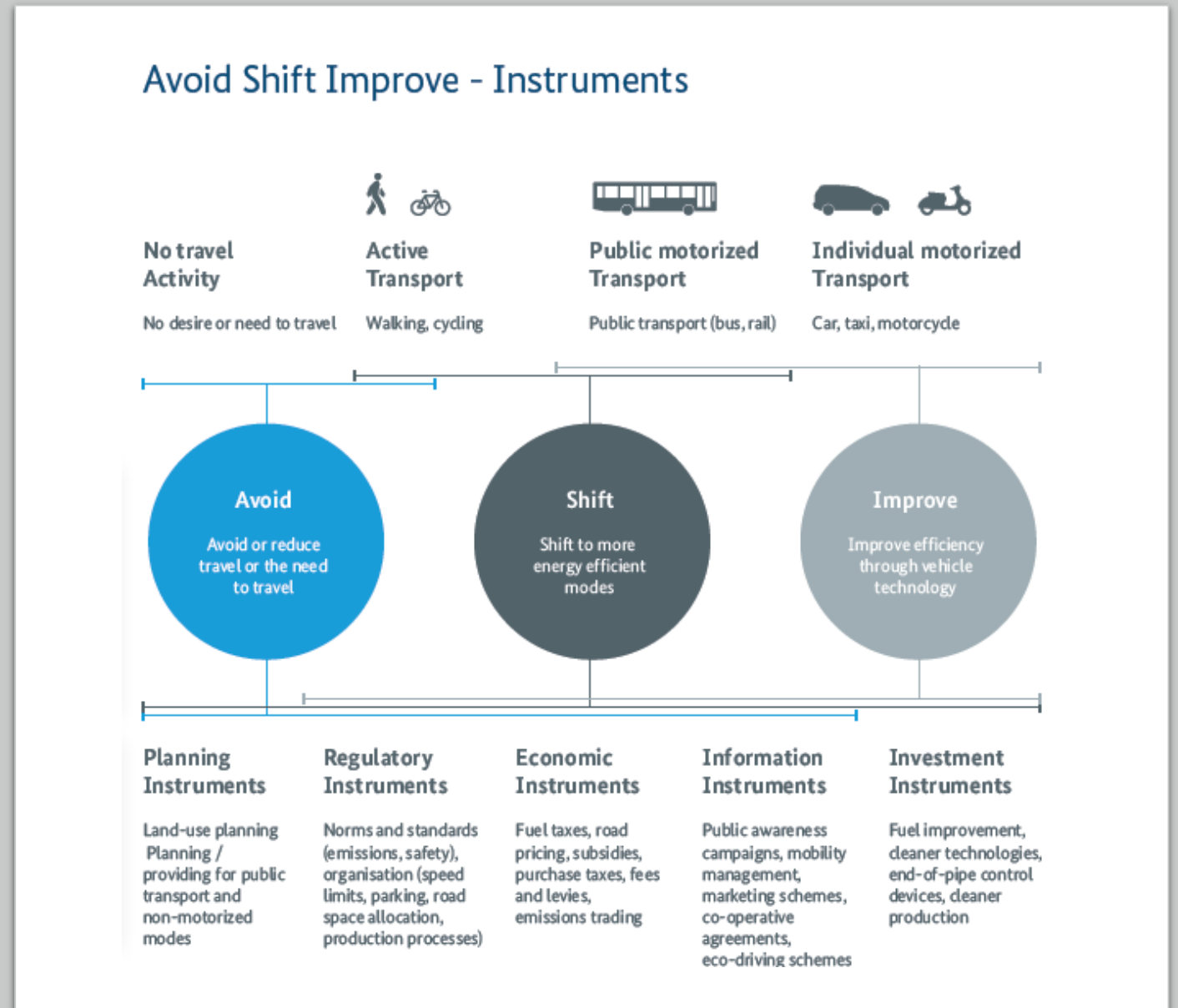
BACKGROUND AND POLICY CONTEXT



HOW SHOULD CITIES DEVELOP
SUSTAINABLE TRANSPORT STRATEGY?

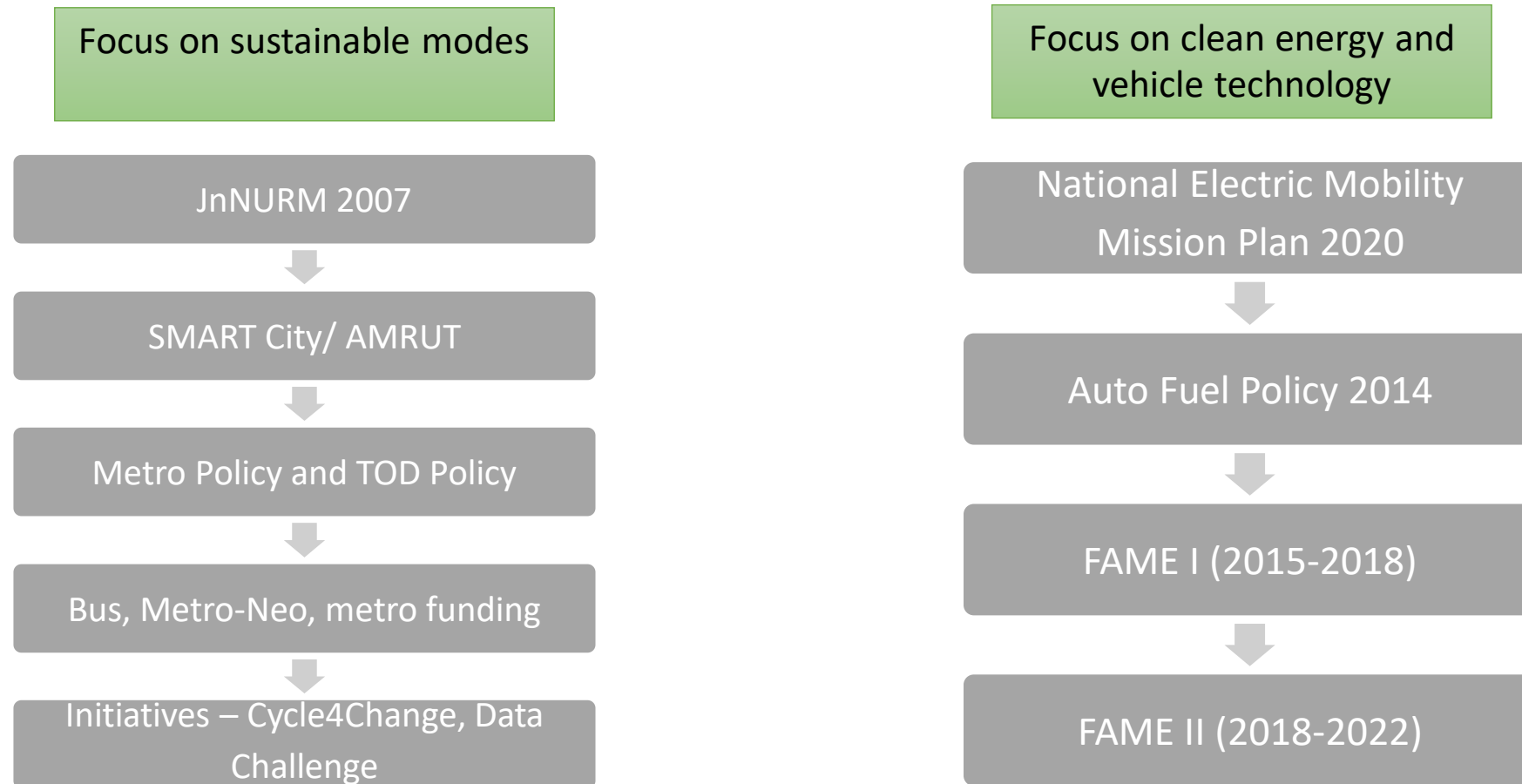
Sustainable mobility strategies

- Avoid/Reduce
- Shift/Maintain
- Improve
- Enable



Policy measures and push towards sustainability

National Urban Transport Policy, 2006



National commitments guiding electrification of transport

India's road from Paris Agreement

	Components	Target	Achieved till 2021
1	To reduce the emissions intensity of GDP by 2030 below 2005 levels	33 - 35%	21%
2	To increase the share of non-fossil-based energy resources by 2030	40% of power capacity	38%
3	To create an additional (cumulative) carbon sink through additional forest and tree cover by 2030	2.5 - 3 billion tonnes of CO ₂	-

Major Initiatives

Renewable energy

India Cooling Action Plan

Electrification of Vehicles

Source: Climate Action: All Eyes on India, NRDC (2020)

Faster Adoption and Manufacturing of Electric Vehicles in India

FAME I (2015 – 2019)

The scheme was anchored by Department of Heavy Industry (DHI) with fund worth of Rs 8950 million

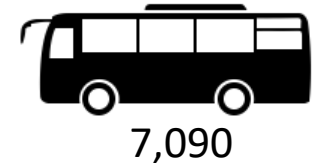
Focus on technology development, demand creation, pilot projects and charging infrastructure

FAME II (2019 – 2024)

DHI launched the scheme with Rs 100,000 million of investment

Focus on demand incentives, charging infrastructure and administration of scheme including publicity, information and education activities

FAME II Target to subsidize

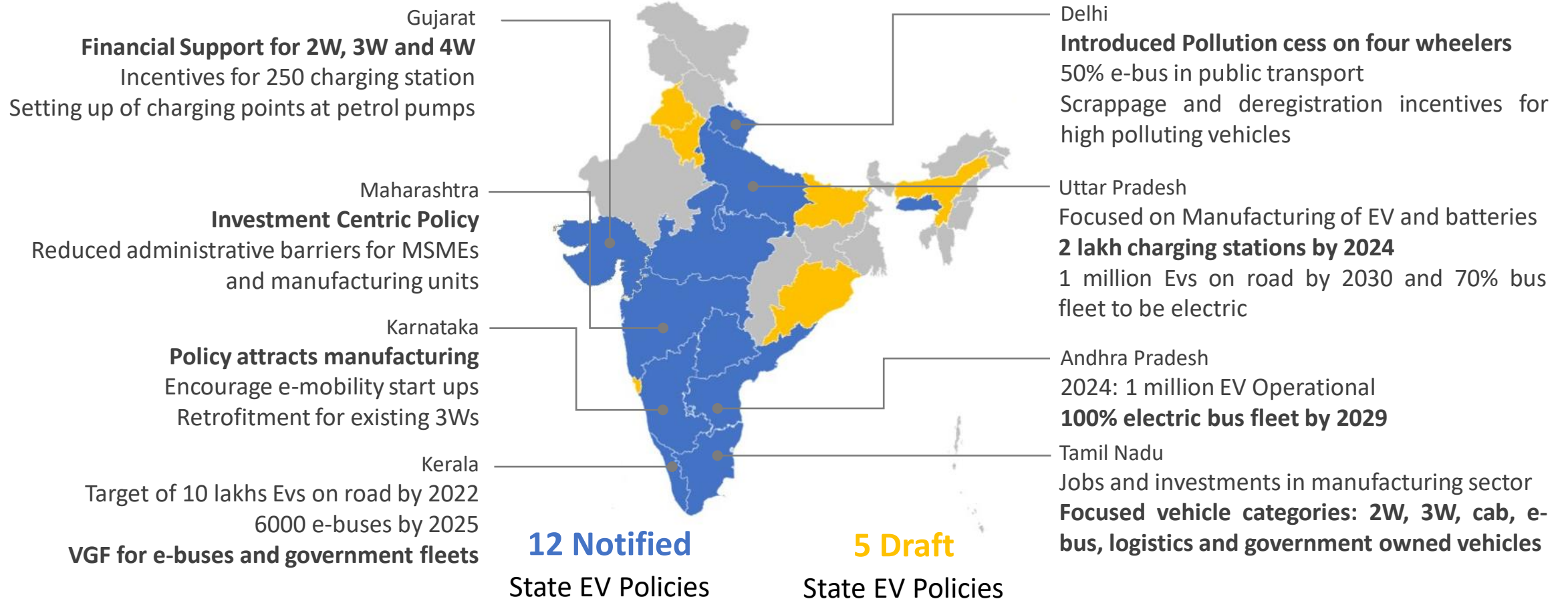


Source: SMEV (2021), JMK (2020)

"The government intends to have EV sales penetration of 30 per cent for private cars, 70 per cent for commercial vehicles, 40 per cent for buses, and 80 per cent for two and three-wheelers by 2030"

- Nitin Gadkari, Minister of Road Transport and Highways, GoI 31 August 2021

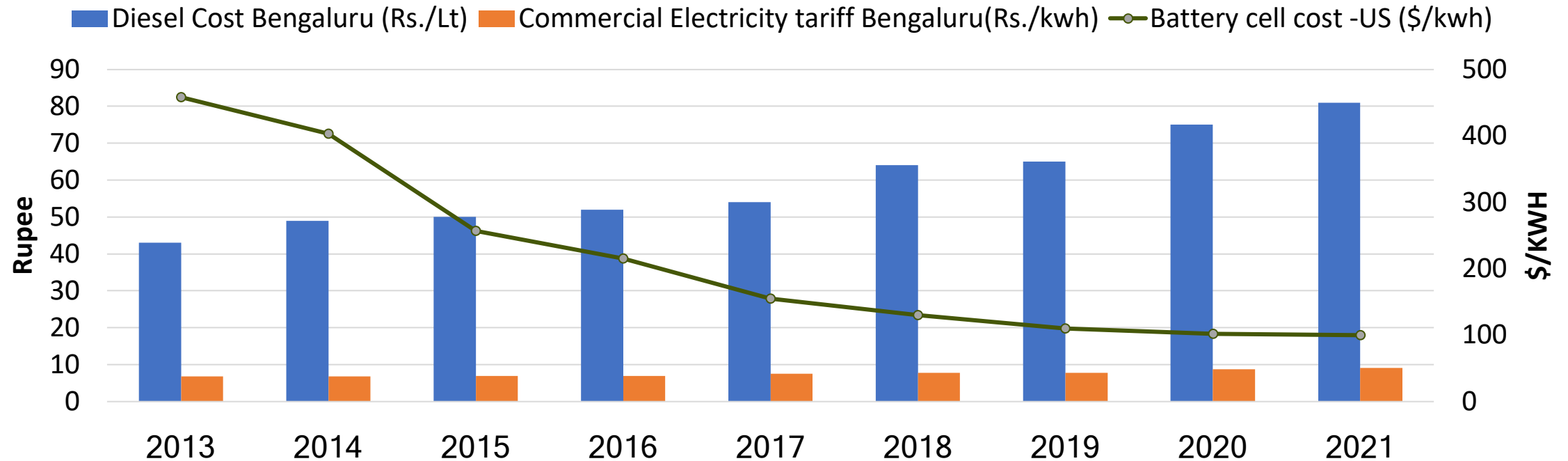
State EV Policies



In Gujarat, Chief Minister Bus Scheme – VGF of upto Rs 25/km on O&M cost for electric buses

Economics of electric mobility

Trends of price of Diesel, Battery and Commercial Electricity Tariff



- Technology advances in battery, vehicle platform design etc., are delivering substantial cost reductions for batteries (IEA, 2019)
- Electric mobility, in the medium to long term, will bring down transport costs and thereby exert positive impacts on the economy and quality of life of the people.

Graph Source: CoE-UT,

Data Source: Tariff Orders of Bengaluru, IEA 2020, <https://www.mypetrolprice.com>

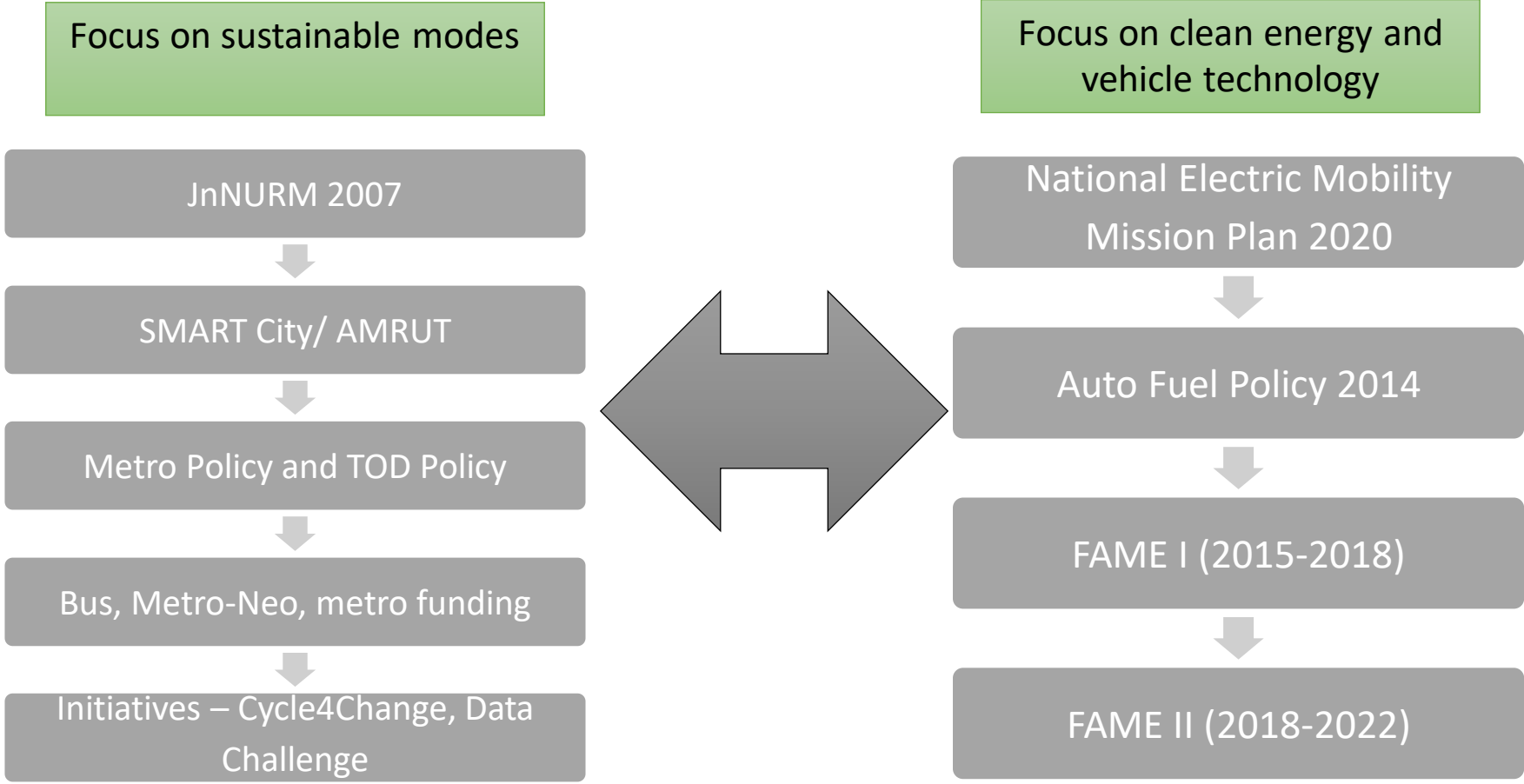
Need for a green mobility strategy

- 1 Slow uptake of electric vehicles in India - electric mobility transition mostly as standalone projects adding only few electric vehicles to existing fleet
- 2 Lack of awareness in the cities on climate change mitigation and also limited capacities to assess requirement and approach for electrification of vehicles
- 3 Challenges pertaining to procurement, financial barriers, technological barriers and infrastructure augmentation affects decision making
- 4 Absence of a strategic plan for accelerating electric vehicle adoption at a local level

Translation of policies to actions at local level – strategy to help accelerate transition to electric mobility

Policy measures and push towards sustainability

National Urban Transport Policy, 2006



CITY ELECTRIC MOBILITY STRATEGY (CEMS)

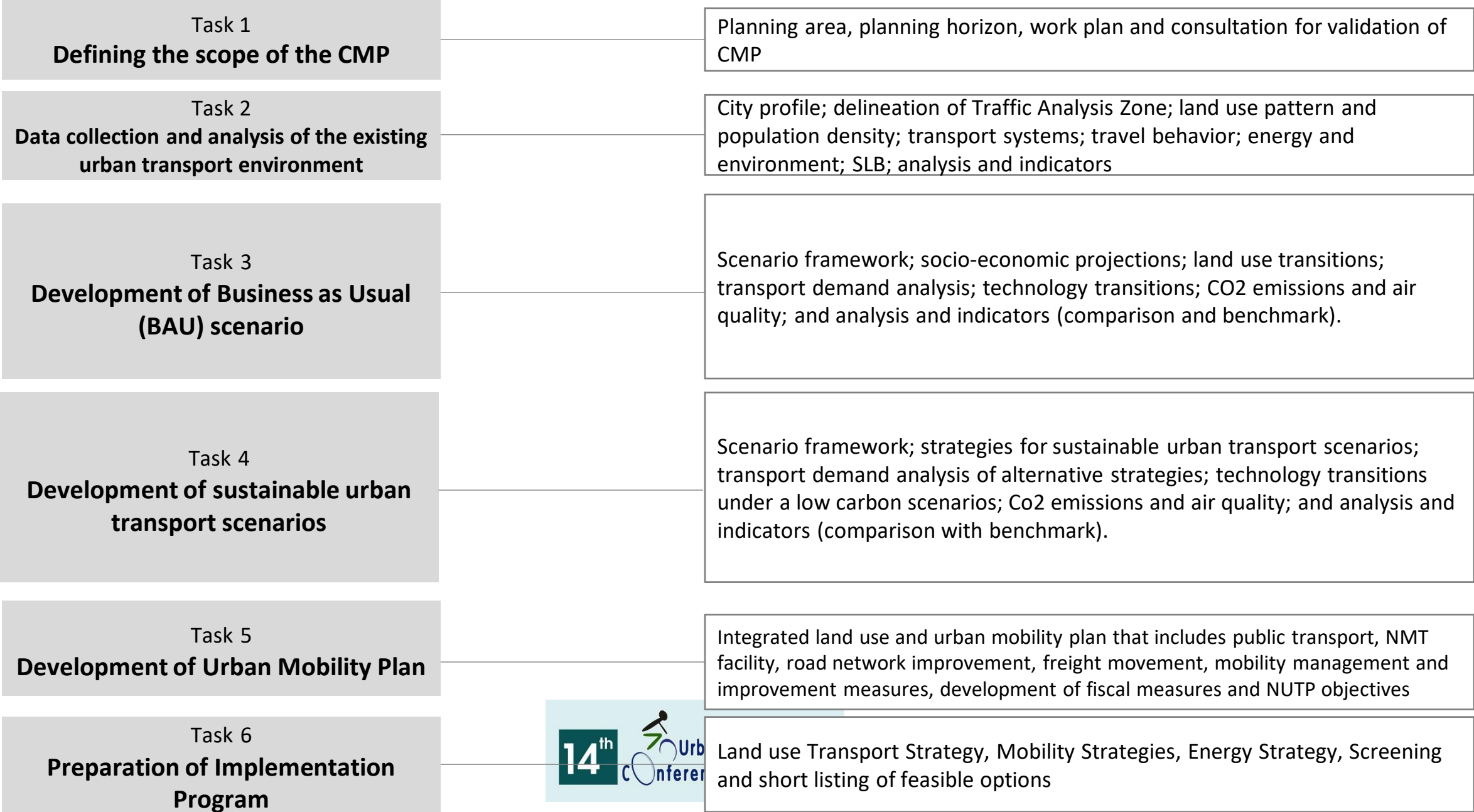
City Electric Mobility
Strategy (CEMS)
supplement to CMP
Toolkit

Guidance document for
estimating Air and GHG
emissions from the
urban transport sector

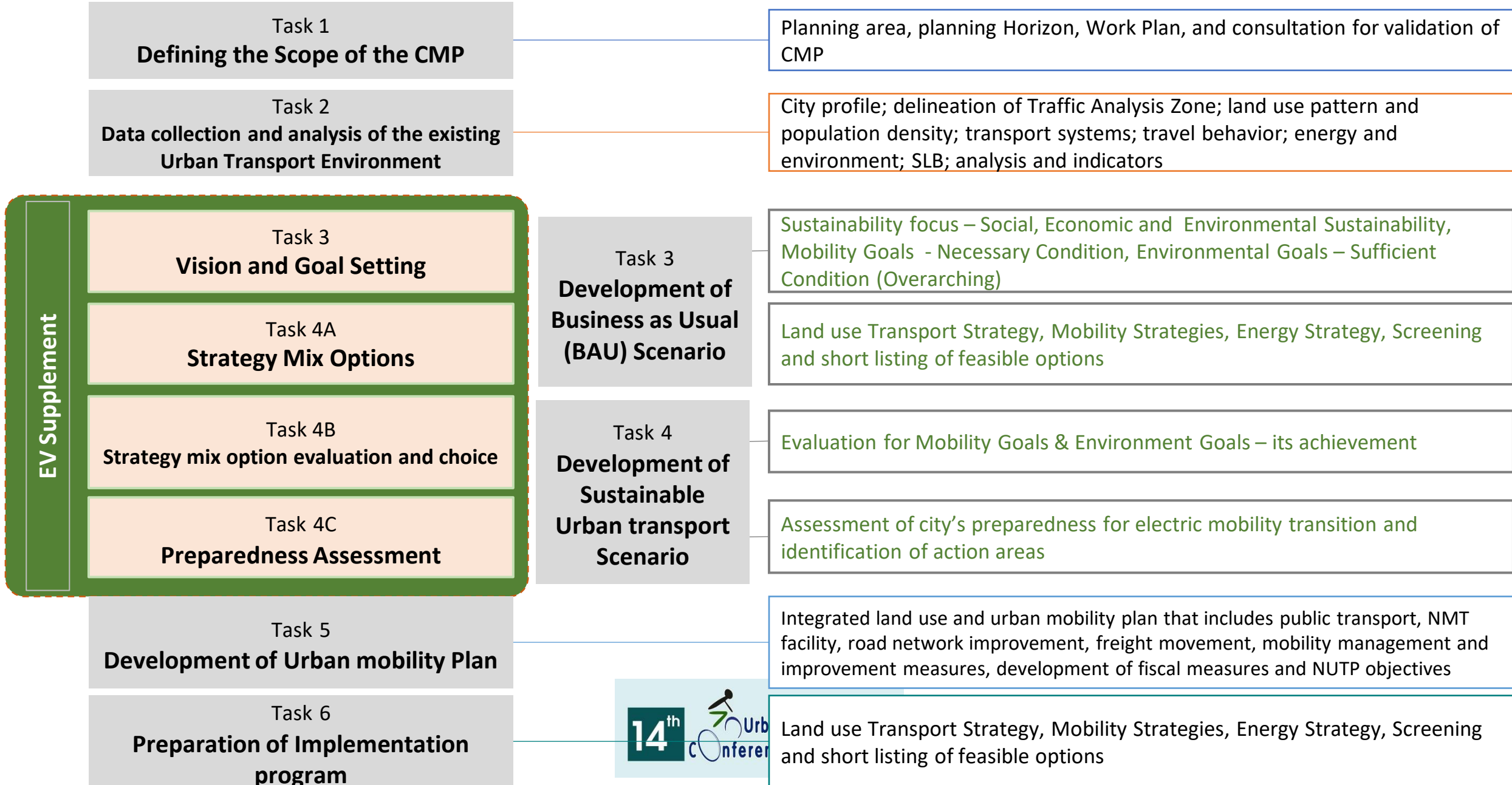
Guidance document for
assessing preparedness
of cities to adopt electric
vehicles

Prepared by Centre of Excellence in Urban Transport under “Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)” commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and jointly implemented by Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH and Ministry of Housing and Urban Affairs (MoHUA), Government of India

Existing CMP Framework



Recalibrating CMP Toolkit



Formulation of Vision, Objectives and Targets – International cities

Singapore's vision: Singapore: The 45 Minute City

The LTMP 2040 aims for a convenient, fast, and well-connected transport network that can get residents around the city in 45 minutes or less; an inclusive transport ecosystem; and a healthier, cleaner, greener transport environment.

The objectives are:

- 45-Minute City with 20-Minute Towns in 2040
- Transport for all
- Healthy lives and safer journeys

Phase out ICE vehicles and have all vehicles run on cleaner energy by 2040.

All buses to run on clean energy by 2040.

London: Transport is central to the vision of the Mayor

The central aim of this strategy – is to create a future London that is not only home to more people, but is a better place for all those people to live in.

The objectives are:

- Healthy Streets and healthy people
- A good public transport experience
- New homes and jobs

Zero emission transport system by 2050. Procure only zero emission buses from 2025. Entire transport system to be zero emission 2050.

New York's tagline is 'OneNY2050' EFFICIENT MOBILITY

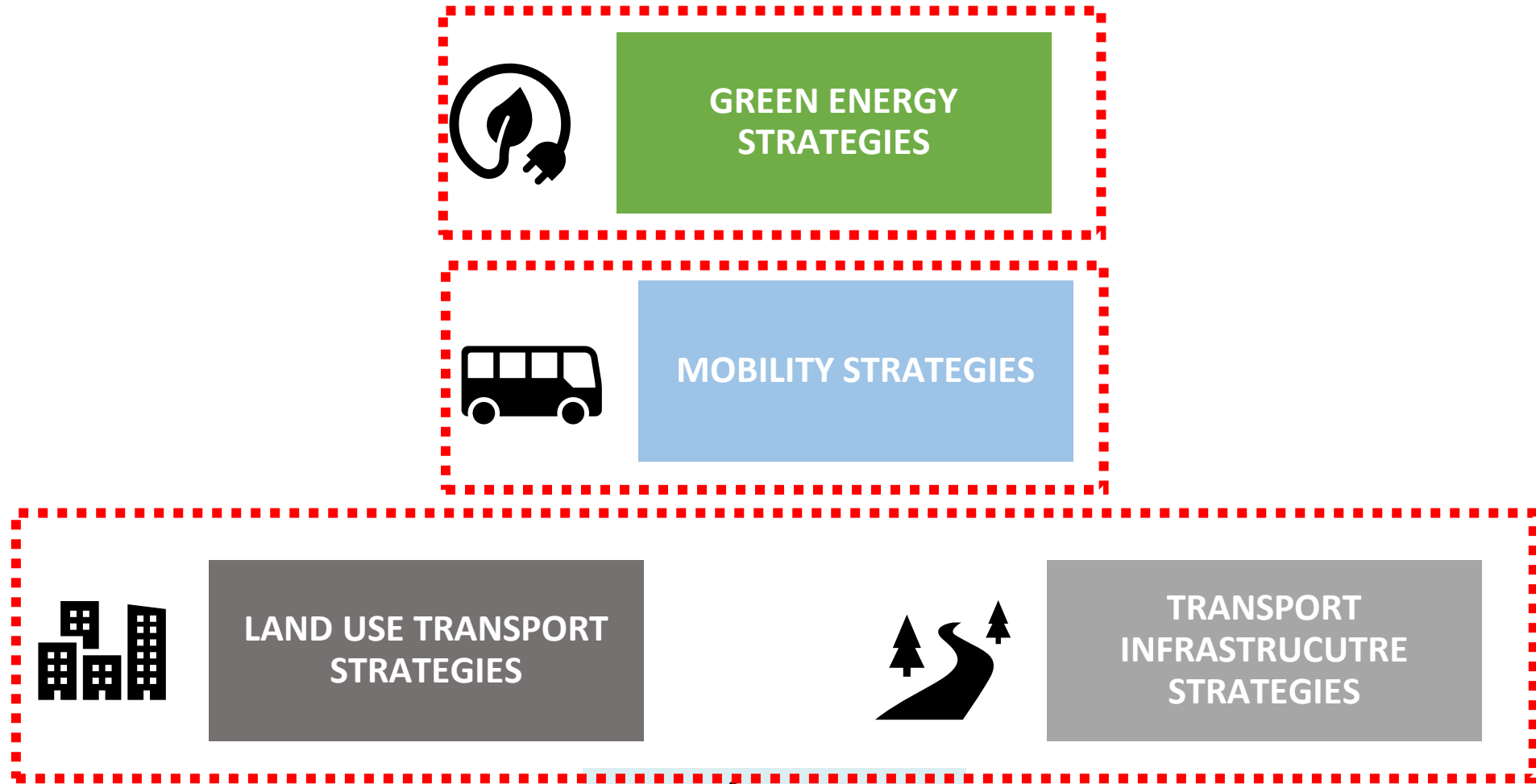
New York City will enable reliable, safe, and sustainable transportation options so that no New Yorker needs to rely on a car.

The objectives are:

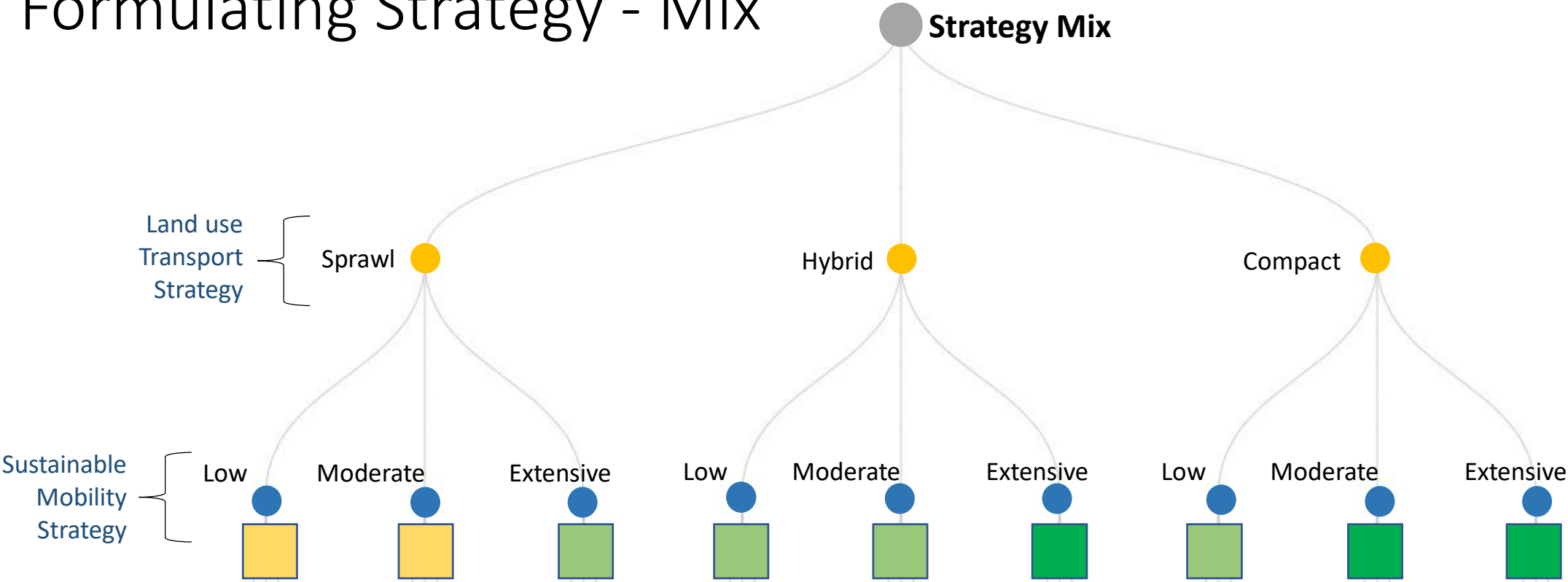
- Modernize New York City's mass transit networks
- Ensure New York City's streets are safe and accessible
- Reduce congestion and emissions
- Strengthen connections to the region and the world

20% of the motor vehicles sold for use in New York City to be electric by 2025, up from less than 1% today

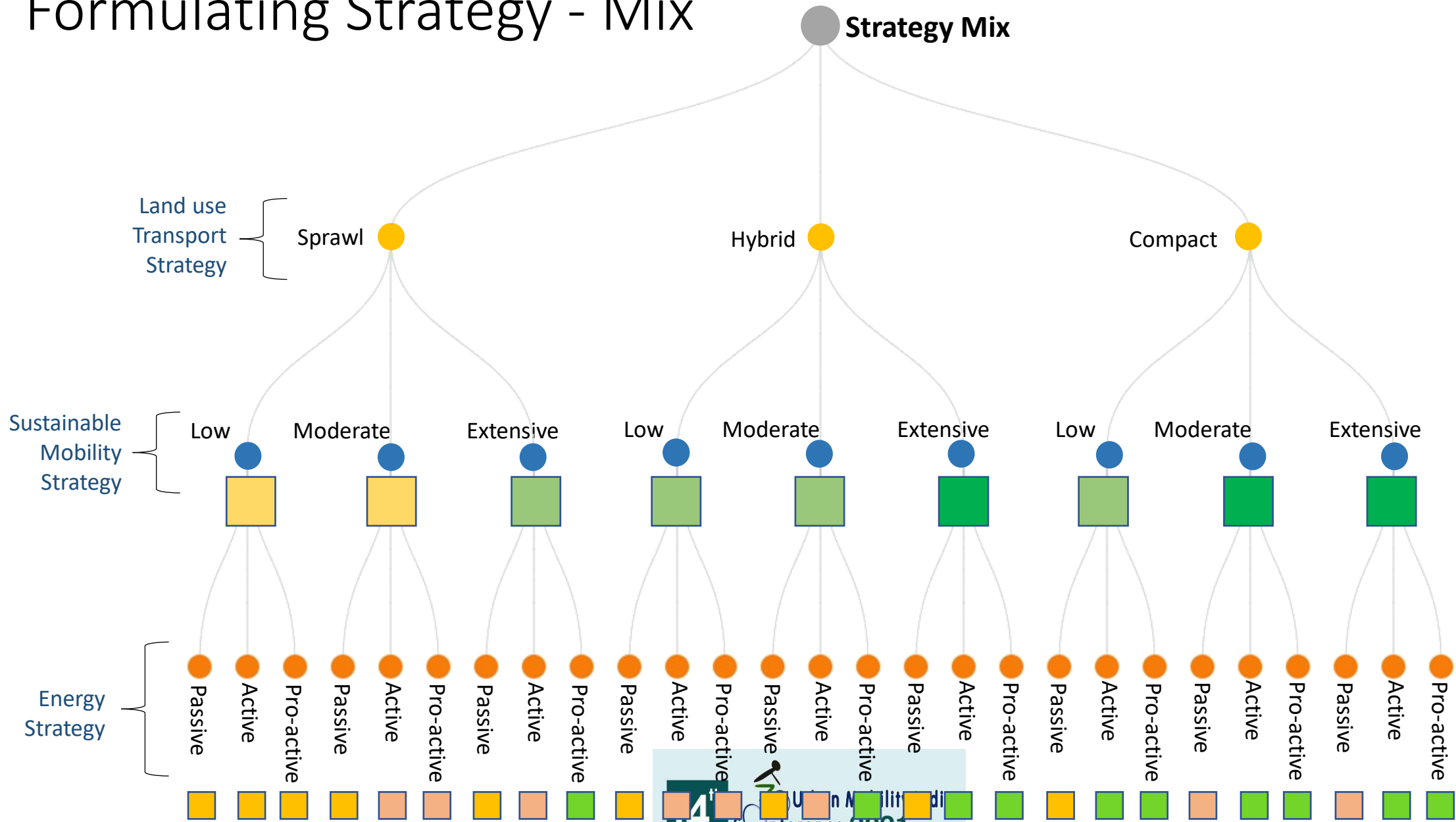
Formulating Strategy - Mix



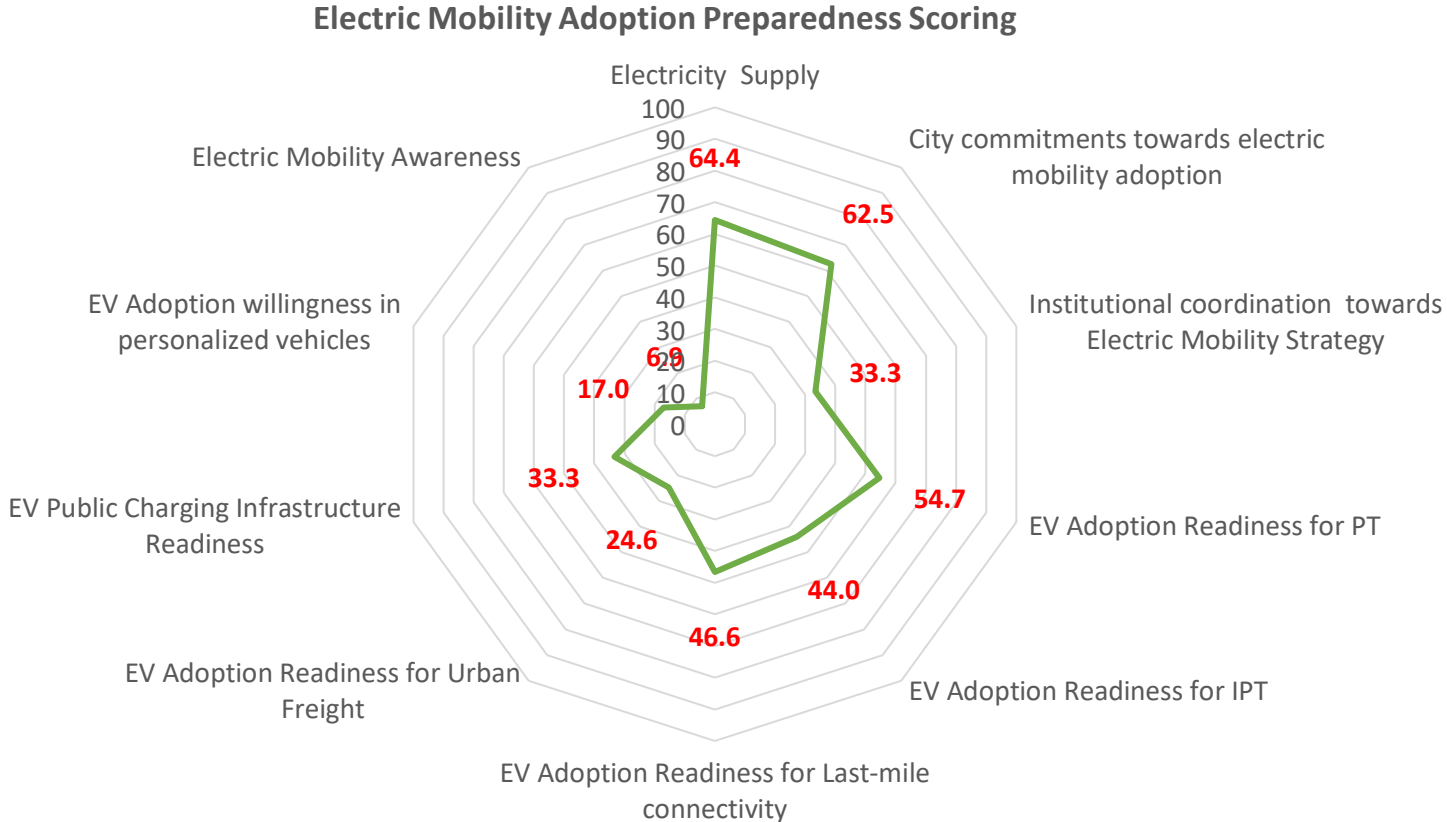
Formulating Strategy - Mix



Formulating Strategy - Mix



City's preparedness assessment for EM adoption



Sample City EV Adoption Readiness Score



Summary

- Translation of national policies on sustainable mobility to actions at local level
 - Need for a strategy development by cities
 - Cities need guidance on how electric mobility/green energy strategies could be incorporated
- City Electric Mobility Strategy (CEMS) supplement - a framework for consideration
 - Guidance on how green energy strategies along with land-use transport and mobility strategies could be included in the Comprehensive Mobility Plan
 - Readiness assessment for electric mobility and identify action areas

Thank you

shalini.sinha@cept.ac.in

