

E-mobility transition at city level

Roles, applications and policy options

**Hanoi National Training
30th November 2022**



1

**Noémi Mené
CODATU**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 875041

CODATU

Working for sustainable mobility in developing cities

CODATU is an international association governed by the French law of 1901 and created in 1980 in Dakar to promote **sustainable urban mobility policies** and systems in countries of the Global South.

It is a **non-for-profit organization** and recognized as being of general interest.

Contents



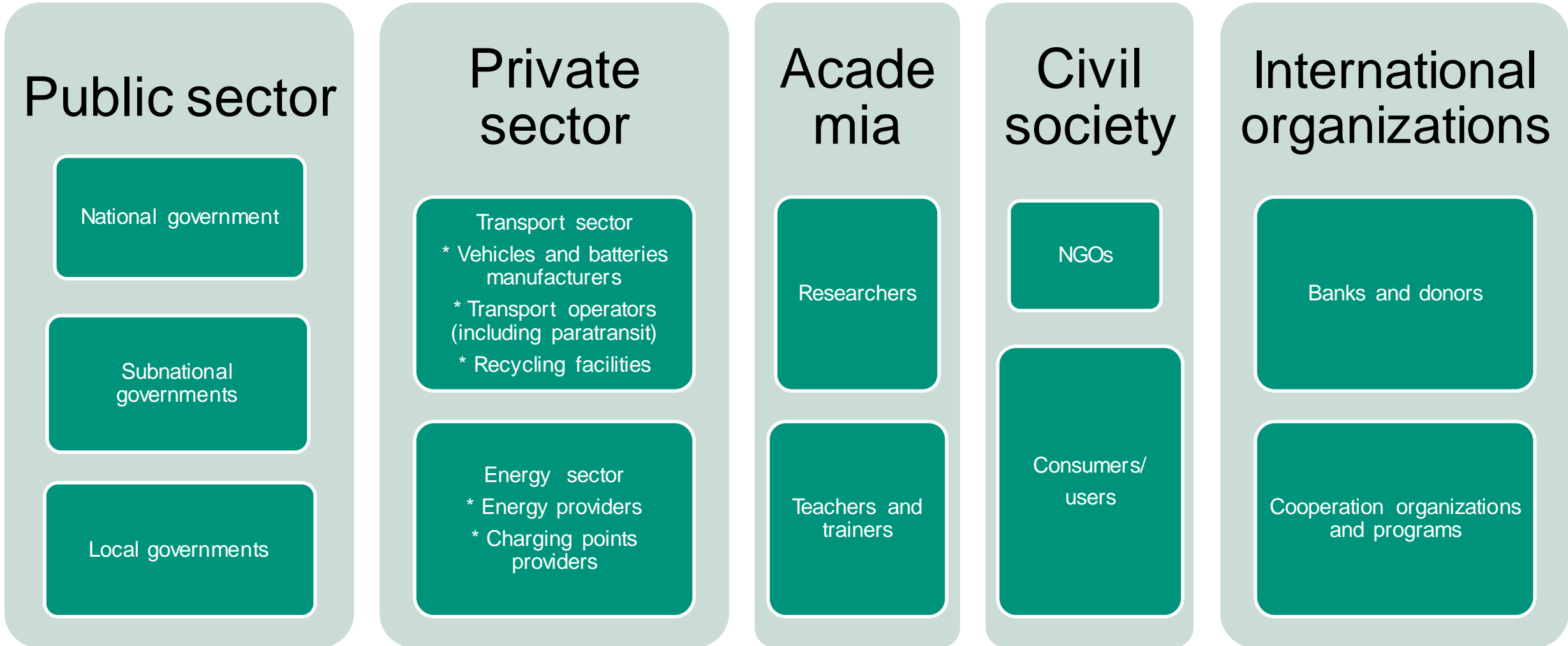
- Context and First steps
- Policy options
- Key take-aways

Challenges



- E-mobility is a Mobility but also an Energy issue
- Both sectors are for now often working in silo
- Need for a consistent policy framework at different levels

Context: Mapping the stakeholders and their action spectrum



- Identify the roles of each stakeholder
- Establish synergies between public authorities (national/local, sectorial, etc.)

→ In order to do this you need data!

Gathering data



- National/ Local regulations
- Coordination between different government levels
- National data : Strategies for mobility and energy development
- Local data : Transport data (trips made in the region, business model of operators, etc.)

Roles of the Local Authorities

Areas of action for Local Authorities

- Transport and mobility planning
- Local regulatory framework
- E-mobility promotion actions



Transport and mobility planning



- Strategic planning for e-mobility (SUMP)
- Traffic regulation
- Infrastructure (dedicated lanes, parking facilities, charging facilities)
- Low-emission zones
- Logistics constraints (delivery zones)
- Prioritize the decarbonization of public bus fleets
- Promote intermodality
- Include tourist e-mobility solutions

Local regulatory framework and levers

- Procurement rules in public contracts
- Construction rules
- Standardization
- Local incentives
- Issuing of permits and licence (if applicable)
- Training of transport operators



E-mobility promotion actions

- Own fleet electrification
- Facilitating living labs and pilot projects
- Encourage start-ups and local business models
- Develop a local e-mob stakeholders ecosystem (start-ups, manufacturers, incubators, etc.)
- Facilitation of knowledge sharing activities
- Elaborate guidance and hire specialized staff
- Communication and sensitization for stakeholders and citizens



The inclusion of paratransit operators



- Represents a high part of the transport modal share
- Key to include the operators and their challenges in the discussion
- Frame their actions with specialized regulation

Challenges of education and training

There needs to be a focus on training for

- Drivers
- Users (behavioral change)
- Workers in the value chain
 - Maintenance
 - Designer, engineers, manufacturers
 - Local authorities staff
 - Academia
- Develop specific courses at all levels



Policy options

Tools	Description
Legal	Rules and directives designed to mandate, enable, incentivize, limit or otherwise direct subject to act accordingly to policy goals
Financial	The policy instruments to involve either the handing out or taking away of material resources (cash or kind), in order to incentivize or disincentivize behaviour by subjects
Communication	Instruments that influence the value chain of e-mobility through the communication of arguments and persuasion, including information and education
Organization / Operation	Actions by governments that provide the physical ability to act directly, using its own forces to achieve policy goals rather than others. This includes the allocation of means, capital, resources and the physical infrastructure needed to act.

Financial incentive for the purchase of vehicles

Excerpt from the financial incentive given by the Metropolitan Region of Lyon to companies for the acquisition of cleaner vehicles

Cargo Bikes	Mechanical	E-bike
Cargo bike (2,3,4 wheels) (in the limit of 60% of the total cost of the vehicles)	1 000 euros	3 000 euros



Promoting by showcasing

Garbage truck in Palma de Majorca



Credit: Civitas

Organization / Operation



Deciding on the use of public space

Catenary charging

Arnhem, NL



Pentograph charging

STM Montreal, Canada

Source: <https://www.ovpro.nl/>

Key take-aways

Key take-aways



- Promote intermodality and mix strategies in SUMP framework
- Involve the whole sector and the different stakeholders
- Implement regulations for traffic, construction
- Elaborate guidance and support for all stakeholders
- Collaborate to the development of business models
- Training

Bibliography



- “Paratransit in Asia: Scalable Solutions to Reform, Modernise and Integrate”, MYC/Espelia/CODATU, 2022

<https://www.mobiliseyourcity.net/paratransit-asia-scalable-solutions-reform-modernise-and-integrate>

- Electric Vehicles in Municipal fleet in Palma, Civitas, 2016

<https://civitas.eu/mobility-solutions/electric-vehicles-in-municipal-fleets>

Thank you !

Noémi Mené
nmene@codatu.org