

Agenda item 5.d.iii

Draft TEC brief on gender-responsive technology and infrastructure for sustainable urban mobility

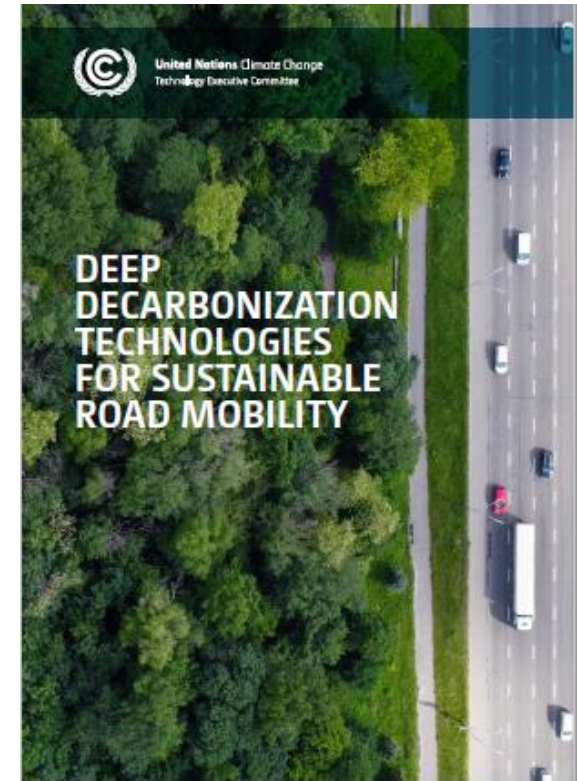
Technology Executive Committee, 26th meeting and TEC-CTCN Joint session
21-23 and 24 March 2023, Songdo, Korea



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Background

- In 2022, the TEC published a technical paper on decarbonization technologies for sustainable road mobility.
- At TEC25, the TEC concluded that this work offers the opportunity for an analysis of gender-responsive solutions in urban mobility that is complementary to and informed by the work of the TEC and the CTCN.
- The TEC agreed to prepare a policy brief on gender-inclusive technology and infrastructure for sustainable road mobility.



Why this TEC brief?

This TEC policy brief elaborates on the role of climate-informed technology policy and action in the urban transport sector through a gender lens. It is prepared to:

- (a) contribute to the development of gender-responsive mobility solutions
- (b) respond to an urgent need to address gender concerns and experience
- (c) raise awareness of gender inequalities and differences in urban mobility

Highlights

This TEC brief:

- Discusses sustainable urban mobility through a **gender lens**
- Shows **the increasing need** for gender-responsive measures and practices
- Discusses **gender-based differences** in interacting with urban mobility systems
- Spotlights **gender disparities in availability, accessibility, affordability, and safety** of mobility systems and services
- Highlights **key challenges** to achieving gender-responsive urban mobility that have to do with the broader policy landscape and systems
- Offers **tailored considerations for action by different mobility stakeholders**



IV. Gender and Sustainable Urban Mobility

- Target 11.2 of the **SDGs**, is to: “by 2023, provide access to safe, affordable, accessible and sustainable transport system for all improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons”
- More than 95% of countries have included transport-related action in their **NDC** and the major cities adopt ‘**Avoid-Shift-Improve**’ framework’ such as circular economy and shared economy.
- The interplay of mobility and gender, age, race, disability and socio-economic status (commonly referred to as **intersectional factors**) is highly **contextual** and requires consideration of different needs and circumstances.
- Women, girls, and disadvantaged groups experience higher **vulnerabilities** and are more likely to be overlooked by **decarbonizing measures**.

V. Gender-based differences and disparities in interacting with urban mobility systems

Travel patterns

- Trip chaining vs. single-purpose trips
- Walking vs. motorized transport
- Public transport vs. private vehicle

Economic and social inequalities

- Participation in the labor market
- Ownership of essential assets
- Digital literacy
- Safety and security concerns

These differences lead to gender-based disparities in the [availability](#), [affordability](#), [safety](#) of, and [accessibility](#) to mobility systems and services



V. Gender-based differences and disparities in interacting with urban mobility systems

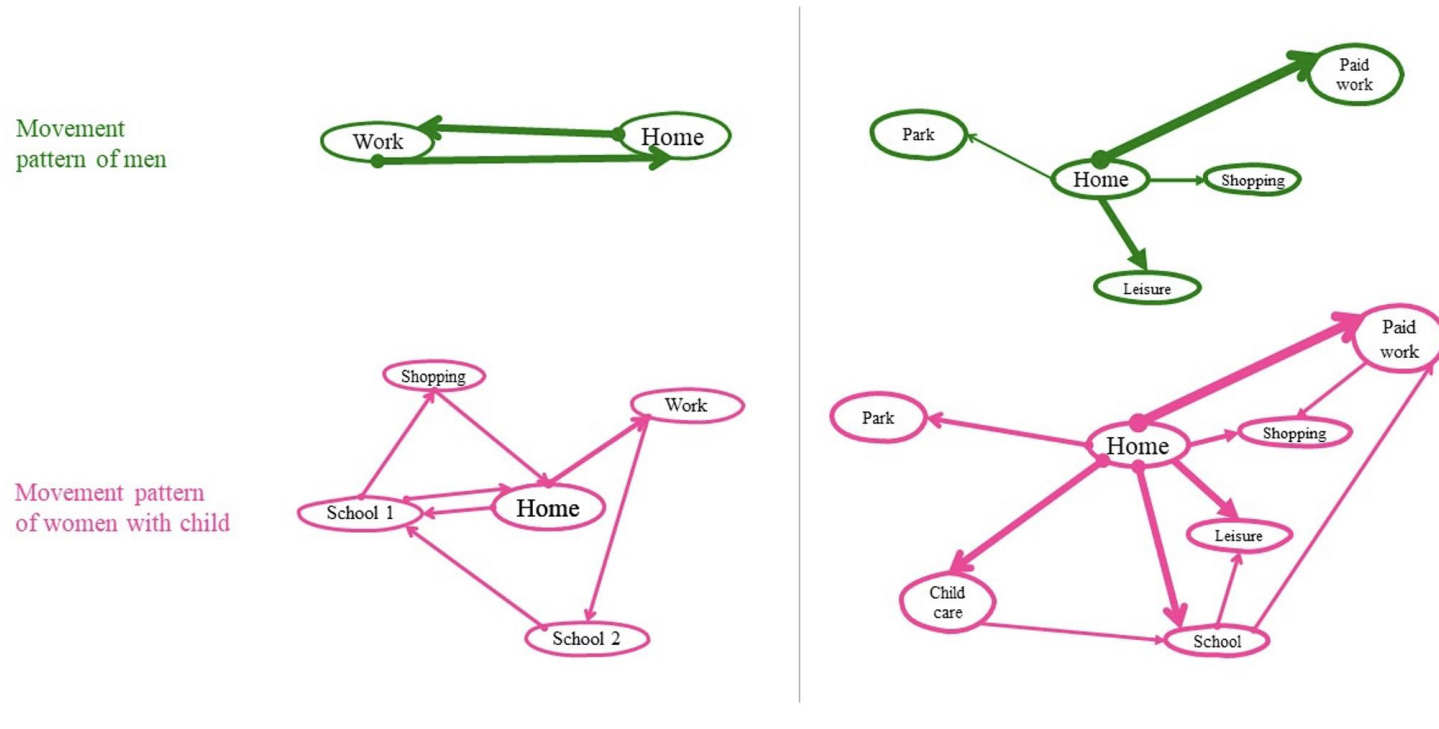


Figure 1- Summary of general travel patterns of men and women observed in 2017 in a slum in Buenos Aires (Allen 2018) (left) and in 2021 in the European Union (Diehl & Cerny 2021) (right)

Addressing gender-based disparities in interacting with urban mobility systems

- **Availability**, e.g. **expanding** the urban transit network and **connecting** it to the local transport infrastructure (for example bike lanes, demand-responsive buses in sub-urban areas) to increase **geographic coverage and connectivity** of mobility systems to the last-mile.
- **Accessibility**, e.g. Ensuring **no-barrier access to** buses and trains, and **facilitating easy access to information** about the routes and schedules of public transit systems.
- **Affordability**, e.g. utilizing **multi-modal** transit passes and **ticketing systems** that alleviate high accumulative transit fares associated with trip-chaining, for example lower off-peak fares, and charging passengers per time instead of per journey and per person.
- **Safety**, e.g. providing passive **surveillance** at transit stops, adequate **lighting** systems, designated “**women-only**” **areas**, and installing **closed-circuit television** technology and **mobile-enabled emergency buttons** for passengers and drivers to use when feeling at risk during travel.

VI. Challenges to gender-responsive urban mobility

Cities across the world are faced with multi-faceted and context-specific **challenges** as well as common **systemic barriers** in adopting and executing gender-responsive policies and actions, for example:

1. Strategic approach and underlying **value systems**
2. Mobility **data** collection and planning models
3. **Capacity, knowledge**, and technical **skills** of the mobility policy makers, workforce and users
4. **Labor** and employment systems
5. **Planning** and **budgeting** frameworks
6. Stakeholder engagement and **governance**
7. **Education** systems
8. **Financing** mechanisms and systems

VII. Options and good practices for gender-responsive urban mobility

A. Impacting the demand for and use-patterns of transport infrastructures by improving **availability**, **accessibility**, **affordability**, and **safety** of mobility systems and services

B. Fostering enhanced representation and participation of all genders by bolstering **gender diversity** and **gender awareness**

- in **users and operators**
- among **experts, designers and providers** of mobility products and services.
- in gender-diverse **institutions** and gender-responsive **processes**.
- through **regulatory frameworks** and **governance** of sustainable urban mobility

VII. Options and good practices for gender-responsive urban mobility

Good practices from **CTCN technical assistance**

- **Feasibility study for low emission land transport sector in Vanuatu:** CTCN identified that economic role of local women is intertwined with their transport use. Almost all sellers in the market were women – transporting their products crucial.
- CTCN conducted workshops to improve women’s access to social services & economic opportunities – which should be enhanced through EV policies.
- Government expected to take cross-cutting approach for integrating policies – RE, e-bus introduction & gender sensitivity.
- **TA in Papua New Guinea for training all genders:** PNG aims to adopt and foster EVs, particular for urban public transport.
- EV policy includes gender-inclusive capacity-building as a main strategy.
- EV policy includes plan for “gender-inclusive skill centers” to train all genders for EV jobs.

VIII. Key findings and considerations for various target groups

[For policymakers at the national level](#)

[For policymakers at the local level](#)

[For communities and civil society organizations](#)

[For policymakers at the local level](#)

[For academic and research entities](#)

[For private sector](#)

[For international organizations, networks and initiatives](#)



Next steps

The TEC is invited to consider the draft policy brief and provide guidance on further work on this matter, in particular:

- (a) Appropriate next steps and potential amendments for the finalization of the content of the policy brief
- (b) The timeline for the finalization of the policy brief

Thank you!

