

10th International Workshop on Sustainable Road Freight Transport

Robust decarbonisation and resilient logistics: Progress in the last decade and a roadmap to 2035

4th - 5th December 2023, Cambridge, UK and online

Planning for urban freight innovation ecosystems Luciano Pana Tronca





Urban freight in context

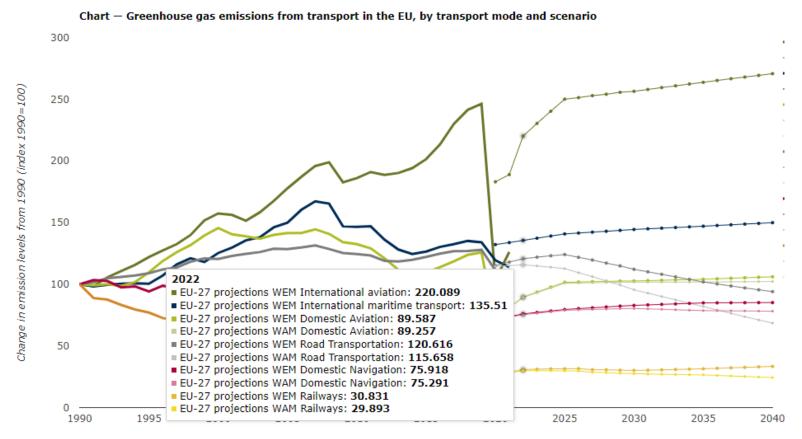
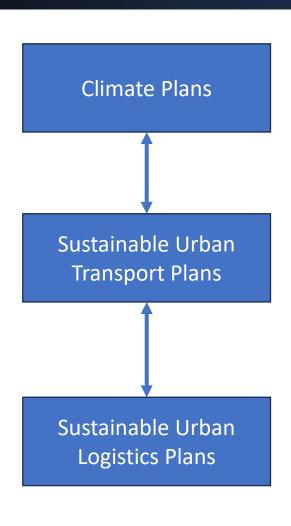


Figure 1 Road transport emissions projected for 2022 are between 15% and 20% depending on the scenario (source: (European Environment Agency, 2022)

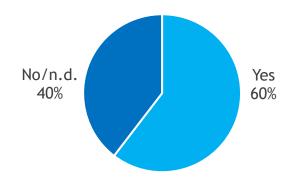
- Lights Goods Vehicles fleet growing at around 1.7% annually (ACEA, 2023) and
- E-commerce growing at +10% (Ecommerce Europe, 2022).
- Disparities between cities in the implementation of net-zero innovation
- A systems approach is needed to make a change in scale and depth that considers user preferences, rules and regulations, and the involvement of different stakeholders > transition leapfrog



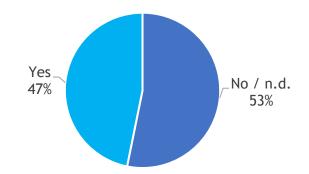
Climate Plans and Transport Actions Database



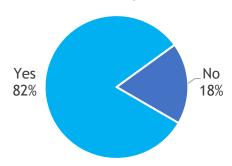




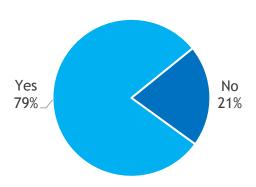
Climate Plan includes assessment the synergies, trade-offs, and co-benefits of actions (at planning stage)



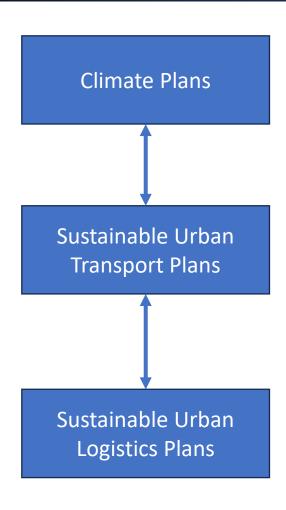
Climate Plan has an **indication** of level of impact



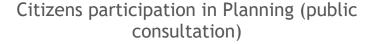
Climate Plan mentions M&E

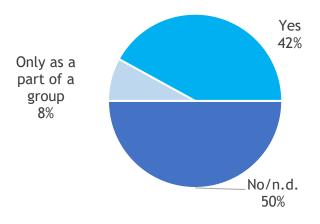


Climate Plans and Transport Actions Database

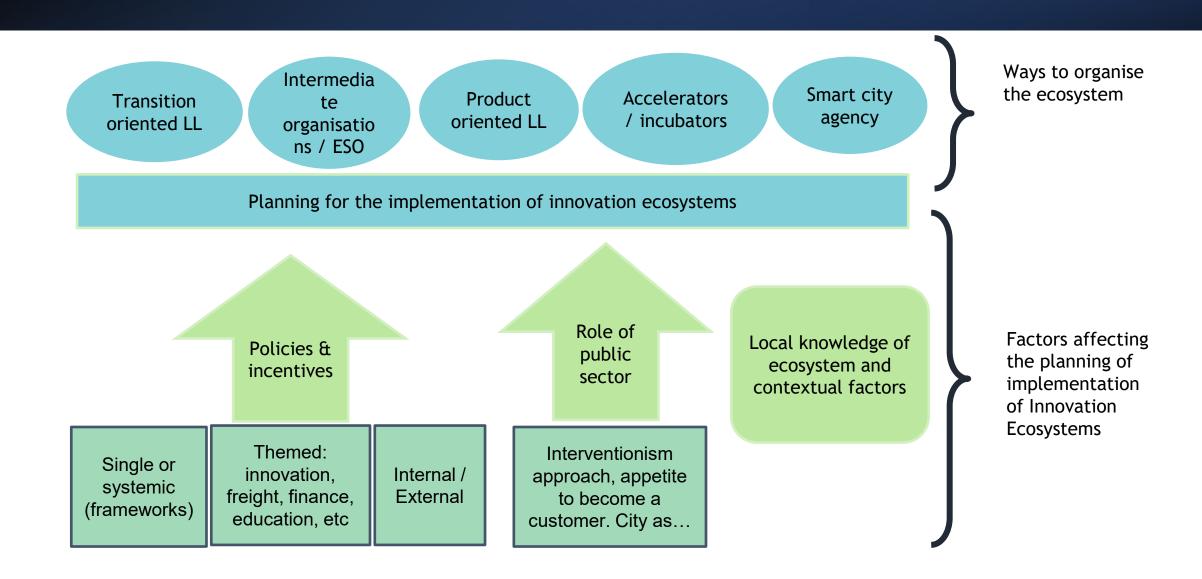


21/50 mention freight decarbonisation actions





Policies and incentives planning



Policies and incentives planning

Planning and operational tools, recommendations, guidelines, standards and technical requirements (Mora et al, 2018). Alignment of industry goals, management support (Kervall and Palsson, 2022) public serving the

Strategic management, monitoring, project value sustainability (PMO) (Sandhu, Al Ameri, Wikstrom, 2019).

> Definition of role of city as provider, catalyst, learner, experimenter (Costales, 2020)

INTERNAL **URBAN FREIGHT INNOVATION ECOSYSTEMS** Incentives for knowledge exchange: invention disclosure, data protection, IP, networking, physical incentives (Clayton, Feldman, Lowe, 2018). Referrals and info sharing (Harper Anderson 2018).

> • Finance: market entry regulations, counter cyclical finance, VC, co-funding, seed funding.

Leadership and project management support: stakeholder management, action planning, communication tools (Ferraris, Santoro, Pellicelli, 2020). Advisory and mentoring, partner operations support, joint activities (Harper-Anderson 2018). Place leadership and platform policies (Sotarauta & Suvinen, 2019).

City conditions

Directed to increasing favourable systemic conditions for the emergence of innovation (indirect)

- Systemic conditions: networks, leadership, finance. talent, knowledge support services
- Framework conditions: formal institutions. infrastructure, culture, demand (Stam 2015)

Economy and knowledge economy, environmental and infrastructure, social and talent-cultural, urban innovation system, entrepreneurship (Penco, Ivaldi, Musso, 2020)

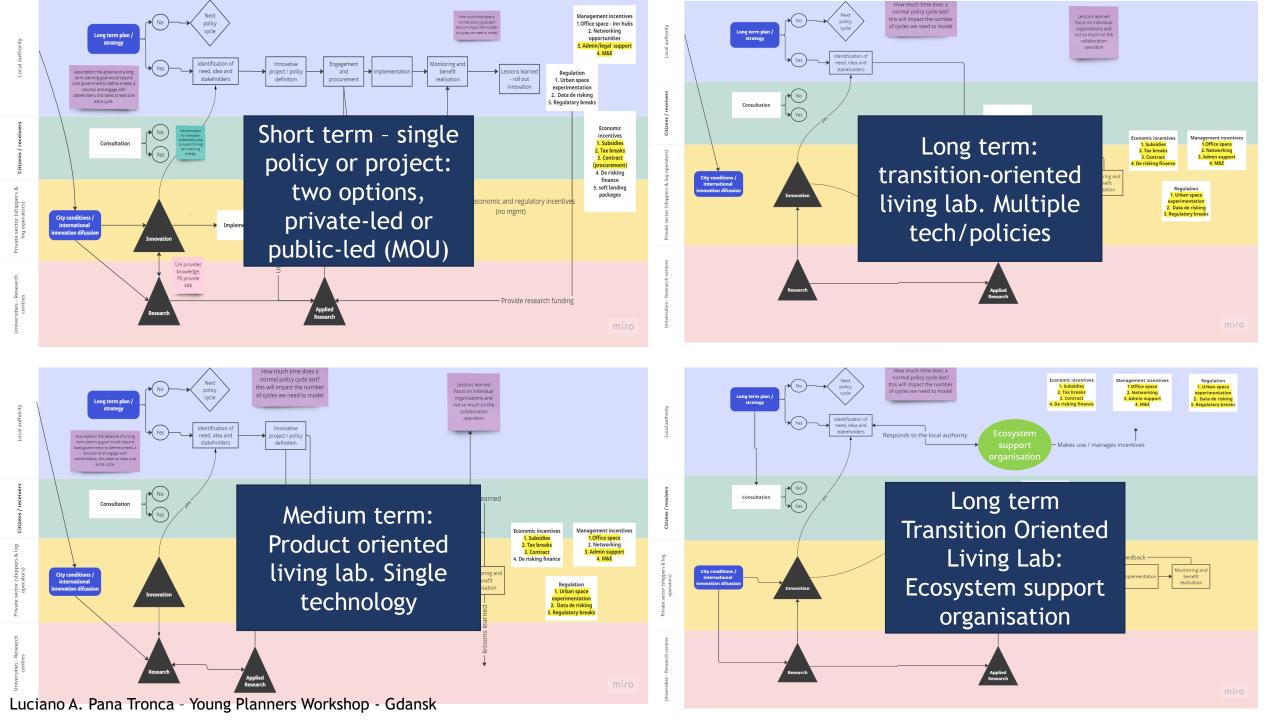
Case studies: Innovation calls

Antwerp





Lucca





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