

## Cyclo-Logistics in Greater Paris, Alternative Models for Last-Mile Deliveries

The integration of cyclo-logistics in real estate projects

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Cyclo-logistics now occupies a growing place in French cities. Its rapid development can be explained by a number of factors. Firstly, climate change has made it necessary for public authorities to take measures to organize logistics networks. Whether through regulations or incentives such as the promotion of urban warehouses, low-emission zones, bicycle subsidies or pedestrianization of streets, local authorities are promoting soft modes of transport and sending strong signals to transporters. In addition to the challenge of decarbonizing freight transport, improving the quality of life in cities, and more specifically the air quality, is a second reason why cyclo-logistics is gradually finding its place in cities. As goods transport is still a sector that generates large amounts of CO2, NOx and fine particles, logistics companies are being asked to propose alternative solutions. Amplified by the strong growth of e-commerce and the increase in volumes to be delivered, the challenge (including in terms of the company's image) of setting up a low-carbon supply chain now requires a shift to new types of transport vehicles.

Quieter and more agile in urban environments, cargo bikes enable logistics companies to meet both environmental challenges and the new requirements of end customers in terms of speed and reliability of deliveries. In order for cyclo-logistics to be efficient, its actors express a specific real estate demand, targeting spatial configurations more adapted to cyclo-freight processes.

Within the framework of this study, which was carried out in a context where the use of light commercial vehicles dominates and the flow of goods is growing strongly, we questioned the **viability of the economic models of cyclo-logistics** and the ways in which it can be deployed in the city. In addition, the investigation sought to understand **how the actors of urban production can meet the spatial needs of cyclo-logisticians.** 

In order to answer these two questions, the study was based on the mobilization of three working methods. Firstly, a bibliographical search on the theme of cyclo-logistics. Then, in order to obtain a global and concrete understanding of the cyclo-logistics ecosystem, **a series of interviews allowed us to analyze the structuring of the sector** as well as the way the actors interact within it. Finally, in order to integrate a more operational approach in the reflections developed within this study, **visits to the logisticians' operating sites** were essential.

Indeed, the meeting of the actors within their place of activity made it possible to obtain a precise vision of the operating processes and the spatial needs expressed.



What are the observations and conclusions resulting from this survey?

Cyclo-logistics represents an **operating mode adapted to the constraints of dense urban spaces**. The uses of cargo bike transport generate less nuisance and enjoy greater social acceptability. As its operational schemes can take various forms, cyclo-logistics has the **capacity to adapt to different urban contexts**. Today, we can observe that the number of cyclo-logistics operators is growing and that, in parallel, **an ecosystem of companies offering support services such as maintenance or consulting is being structured**. From a general point of view, cyclo-logistics is therefore an activity **capable of generating economic profitability**, **subject to the geographical context in which it is deployed**. Indeed, **the density of delivery points, the management and development of bicycle lanes and the topography essentially** determine the productivity of a cyclo-logistics activity.

While the geographical context has a strong influence on the relevance of cyclo-logistics, the spatial configuration of the real estate in which the activity is located is also a determining factor. **Operators are mainly looking for first floor areas of up to 1,500 m<sup>2</sup>**. The **possibility of a mass arrival on the site as well as a privileged access to the bicycle network optimize the cyclo-logistic processes**. As land in the metropolis is a scarce and costly resource, operators are time, in order to rent space in the city to cyclo-freight operators, the real estate model needs to be further refined. Whether for new construction or redevelopment operations, we note that for some operators, there is still a mismatch between rental capacities and the rent levels required to carry out a real estate project in the city. The real estate offer, both in terms of its architectural forms and its rental model, must therefore be worked on in depth.

In conclusion, the study identified all the **factors that have an impact on the viability of the economic model of a cyclo-logistician**. It thus defines the scope of relevance of cyclo-logistics, particularly in the context of Greater Paris. Finally, the study emphasizes the importance of bringing together all the players in the cyclo-logistics ecosystem in order to collectively guide the development of this activity in cities.

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