

# URBAN LOGISTICS AN ASSET FOR THE CITY AND ITS INHABITANTS



#### **FOR MORE INFORMATION**

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Si la logistique métait contée : 12 histoires pour comprendre l'évolution du commerce et de la livraison Jérôme Libeskind, Published by FYP Editions, 2021

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Urban logistics already exists in cities, and does not only concern

e-commerce but all activities

- Supply is a vital function in the city 04 but it is also a source of external impacts and disturbance
- Urban logistics provides a service to 05 the city and its inhabitants
- Consolidating flows of merchandise is 06 a lever for reducing the environmental impact of deliveries

Urban logistics does not require warehouses measuring thousands of m<sup>2</sup>, it can revitalise small disused premises (about 2,000 - 5,000 m<sup>2</sup>)

- Urban logistics does not require 08 platforms measuring thousands of m<sup>2</sup> in the heart of the city
- Several property solutions are 09 possible for logistics in urban areas
- Duration of renovation work, complexity and impact: a variety of 10 solutions

A small logistics facility in an urban area has measurable advantages

There are quick solutions for redeveloping existing premises. These solutions require only minor work and can be included in discussions on large-scale projects, led by semi-public companies and local authorities

- Small-scale projects can offer quick 13 results
- Small premises help to reduce the 14 negative impact of urban logistics

The cargo bike is a new transport solution adapted to local conditions

Urban logistics has many social, economic and environmental benefits, all of which can be measured on the ground

- An asset for small local businesses 17
- Economic and social benefits for the 18 whole city

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A recent legislative and regulatory 20 framework Glossary

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## URBAN LOGISTICS ALREADY EXISTS IN CITIES



## **SUPPLY IS A VITAL FUNCTION** IN THE CITY BUT IT IS ALSO A **SOURCE OF EXTERNAL IMPACTS AND DISTURBANCE**

Urban delivery is characterised by a large number of flows and transported loads. It is a complex ecosystem that must be managed for each of the sectors.

### **Contribution to** urban congestion

- Deliveries account for **9-15% of vehicle movements** but, in relation to the size of a car (Private Vehicle Unit), they are responsible for impacts on the public space of 15 to 25%.
- 2 out of 3 deliveries are made by double-parking or unsuitable parking.

### Local emissions of pollutants

- In large cities, about 25 to 30% of fine particle emissions come from road traffic: 40% from goods transport and 60% from cars.
- This is a public health issue.

#### Noise

• A significant proportion of the population experiences high noise levels due to motorways and major roads. Deliveries, especially refrigerated delivery, contribute to this.

#### **Greenhouse gas emissions**

- Road freight transport accounts for **43%** of transport greenhouse gas emissions (the remainder comes from cars).
- Light utility vehicles (-3.5 t), mainly urban, account for almost 50% of freight transport emissions. Emissions are steadily increasing (+19% between 1990 and 2017).

#### Accidentology

- The development of sustainable transport presents the challenge of cohabitation with trucks.
- But the risks also concern delivery personnel. A recent survey of "instant" delivery personnel shows that **29% of** them have had an accident.











## CS LOGICITÉS Urban logistics already exists in cities

## URBAN LOGISTICS PROVIDES A SERVICE TO THE CITY AND ITS INHABITANTS



Urban logistics fulfils many roles:

- It manages supplies and deliveries for shops, local businesses, cafés and restaurants, markets, etc.
- It also involves ancillary flows linked to urban management (circular economy, construction sites, maintenance, etc.)
- And finally, it delivers to residents directly at their homes, at delivery points, etc.



Due to the health crisis, the restrictions and the closure of certain shops, the consumer has become an omnichannel user (both bricks and mortar and e-commerce). This is why companies must adapt their distribution and delivery methods. Hence the increased importance of urban logistics and its organisation.

#### **FOR MORE INFORMATION**

La logistique, fonction vitale Les carnets pratiques de l'Institut d'aménagement et d'urbanisme (Institut Paris Région), 2018

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Urban logistics has been a reality for many years. Its role is to ensure the transport of goods in the heart of cities, their processing in these areas, their delivery to the final recipient as well as the management of returns."





## **CONSOLIDATING FLOWS OF MERCHANDISE IS A LEVER FOR REDUCING THE ENVIRONMENTAL IMPACT OF DELIVERIES**









## URBAN LOGISTICS DOES NOT REQUIRE WAREHOUSES MEASURING THOUSANDS OF M<sup>2</sup>

## Express

SHIP TO

Name Sumame 123 Your Street Your City, ST 12345 123,456,7890 Name Surname

CEO, Company Nan 123 Address St Anytown, ST 12345



## **URBAN LOGISTICS DOES NOT REQUIRE PLATFORMS MEASURING** THOUSANDS OF M<sup>2</sup> IN THE HEART **OF THE CITY**

- Last-mile delivery or urban logistics is the final step in the logistics chain. In an urban environment, this type of delivery requires specific property conditions that can take different forms to fit into the city. This often means small spaces that focus on service to the shops and inhabitants of the area (500 to  $5,000m^2$ ).
- Urban logistics is very different from suburban logistics platforms. The flows are smaller, the site can be the object of a detailed urban integration plan adapted to the area in order to reduce noise pollution and congestion.



Roads of the Future in Grand Paris - Overview of proposals made by the four teams of the International Consultation

Atelier des mobilités, APUR, October 2019

In the heart of the city, property dedicated to urban logistics often involves small spaces and is adapted to the specific needs of the local area."



## **SEVERAL PROPERTY SOLUTIONS ARE POSSIBLE FOR LOGISTICS IN URBAN AREAS**



<sup>-</sup>here are many property solutions for urban logistics.

The surface areas can range from a few dozen square metres to large buildings with several floors.



Large spaces are hard to come by in dense urban areas and are often home to large structural projects, developed by local authorities, in neighbourhoods. These projects require demolition and construction, and are designed according to a medium to long term schedule.



But there are also solutions for smaller projects involving the restructuring of existing premises in a short amount of time, often in just a few months, which are part of more ambitious projects carried out by local authorities.



These urban projects often involve the rehabilitation of former industrial sites and the restructuring of local sites, ranging from 1,000 to 5,000 m<sup>2</sup>. These are often former garages, car parks, urban wastelands or activities undergoing change such as car dealerships.

#### **FOR MORE INFORMATION**

Examples of innovative projects in France and Europe: CIVITAS sustainable and smart mobility for all - urban logistics



authorities."



## **DURATION, COMPLEXITY AND IMPACT OF WORK: A VARIETY OF PROPERTY SOLUTIONS**

	Need	Type of site	Type of building			Duration of the w
	Massification and storage	DEVELOPMENT Land	Traditional warehouse	<ul> <li>Warehouse or courier platform</li> <li>Built on one level</li> <li>10,000 m<sup>2</sup> or more</li> <li>Extra-urban or on the outskirts of town</li> <li>Heavy goods vehicle access</li> </ul>	HGV entry HGV exit	2-3 years
	Flow organisation and urban consolidation	titutitati	Multi- storey warehouse	<ul> <li>Multi-storey building (usually 2-5 floors)</li> <li>Activity 100% dedicated to logistics, storage and cross-docking</li> <li>5,000 - 10,000 m<sup>2</sup></li> <li>Generally on the outskirts of urban areas</li> <li>Heavy goods vehicle access</li> </ul>	HGV entry LCV exit	3-6 years
			Logistics hotel	<ul> <li>Multi-storey building</li> <li>Mix of activities (logistics, but also tertiary sector, shops, housing, crafts)</li> <li>3,000 - 8,000 m<sup>2</sup></li> <li>Heavy goods vehicle access and potential alternative to road transport</li> <li>Integration into the surrounding urban environment - can be located in the heart of the city</li> </ul>	HGV entry LCV exit	
CORSALIS	Local services	Image: Note of the second	Local logistics space	<ul> <li>Street level or underground space, sometimes on several levels, integrated into a larger building, sometimes an urban wasteland or a building in its entirety</li> <li>1,000 - 5,000 m<sup>2</sup></li> <li>Internal light commercial vehicle access and parking</li> <li>No heavy goods vehicle access required</li> </ul>	LCV entry Exit by cargo bike or on foot	6-18 months
			Neighbourhood logistics space	<ul> <li>Space in mixed-use buildings, allowing the management (collection, deposit, delivery) of parcels for a neighbourhood</li> <li>From a few hundred m<sup>2</sup> to 1,000 m<sup>2</sup></li> <li>Public access possible</li> <li>No heavy goods vehicle access</li> <li>Can accommodate an automatic collection locker</li> </ul>	LCV entry Exit by cargo bike or on foot	

HGV: heavy goods vehicle LCV: light commercial vehicle

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## **A SMALL LOGISTICS FACILITY IN AN URBAN AREA HAS MEASURABLE ADVANTAGES**



But the city is, by definition, a place of consumption where people live, consume, move around and enjoy themselves.





An urban logistics facility helps to reduce the flow of carbon-intensive deliveries by heavy goods vehicles and light commercial vehicles, and to reduce the impact of operations.



These spaces are essential for the city to operate properly. Without urban logistics, there would be a lack of stock on shop shelves, market stalls, production sites and in refrigerators. It is an indispensable activity, serving businesses, shops and inhabitants, and therefore the city.



Urban logistics gives a new life to disused premises and spaces, and integrates them into an urban economy based on reducing environmental impacts, the social and solidarity economy, and local economic development.

An urban distribution facility contributes to the smooth running of the city by reducing travel distances, providing flexibility and using decarbonised modes of transport."



## THERE ARE QUICK SOLUTIONS FOR REDEVELOPING EXISTING PREMISES



## SMALLER SCALE PROJECTS CAN OFFER QUICK RESULTS

Many projects can be implemented within one to two years - these short-term projects allow for quick action that is visible to all and easily owned by the community!



Most of the projects are based on existing, underused buildings that are renovated in order to accommodate for delivery activity that is physically closer to the final customer (underground car parks for example) and thus meet the needs of local inhabitants.



The renovation of these underused spaces enhances the value of the area's housing stock.



For the implementation of these projects, a change of activities is often necessary, with the support of local officials.



These projects are the result of close cooperation between all stakeholders (residents, local officials, retailers, transporters, contractors and real estate agents).

#### **FOR MORE INFORMATION**

**Information report to the Senate:** Perspectives of the territorial planning and cohesion policy, with regard to "sustainable urban logistics" Senators Martine Filleul and Christine Herzog, April 2022



Renovating existing buildings allows projects to be implemented within a short timeframe"



## **SMALLER PREMISES HELP TO REDUCE THE NEGATIVE IMPACT OF LOGISTICS IN THE CITY**

- Over the past thirty years, courier agencies and goods warehouses have moved from city centres to the outskirts or even far away from the city due to the high demand for land in large cities.

This decentralisation process has increased the distance of deliveries to the heart of cities and has mechanically increased flows and the associated disturbances, as it has made it necessary to use ever larger vehicles to optimise costs.



- An urban logistics facility therefore has the benefit of:
- reducing the number of vehicles that need to access the area
- reducing the number of vehicles stopping on the street to deliver to end customers
- making the final delivery using decarbonised methods
- having delivery personnel wait inside the premises, not on the pavement

#### **FOR MORE INFORMATION**

Prospective study of the challenges of last mile delivery in a mutualised and collaborative form and their relationship with the concept of the physical internet Study for the DGITM, Florence Toilier, Elsa Le Van, Jérôme Libeskind, Laura Papet, Ministry for Ecological Transition and Solidarity, March 2018

Traffic, noise, pollution: urban logistics helps to redesign the urban landscape for a calmer city







## THE CARGO BIKE, A TRANSPORT SOLUTION SUITABLE FOR LOCAL CONTEXTS



Delivery by cargo bike requires goods to be divided out into spaces close to the delivery areas.



In cities where the development of cycling is a major focus in mobility, it is possible to create synergies and infrastructure sharing between the mobility of people and goods.

Cycle delivery also helps environmental and social issues to be taken into account (reintegration, professional development, etc.).

A shift in transport modes: change in market shares of different modes of transport

FOR MORE INFORMATION

National plan for the development of cycle logistics Ministry for Ecological Transition and Territorial Cohesion, Ministry for Energy Transition, May 2021

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In cities, the cargo bike is replacing the truck for more sustainable, cost-effective and synergistic urban logistics."







## URBAN LOGISTICS **OFFERS MANY SOCIAL, ECONOMIC AND ENVIRONMENTAL BENEFITS**





## AN ASSET FOR SMALL LOCAL BUSINESS TOO

Urban logistics spaces, in contrast to *dark stores*, aim to consolidate and reduce the number of vehicles and create links with local shops.



An urban logistics facility offers a better supply service to small retailers, but also provides them with new services, helping them move towards omnichannel operation.



An urban distribution facility can:

- manage off-site stocks for local retailers, increasing their range of products,
- enable delivery in the neighbourhood or via e-commerce with regular and supervised tools and delivery personnel,
- ensure short circuit deliveries and contribute to the dynamic nature of the territory.



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A local logistics space is a service for small retailers - it facilitates their supply and is a way to help them in their omnichannel approach."



## ECONOMIC AND SOCIAL BENEFITS FOR THE WHOLE CITY

Urban logistics is a lever for a calmer city. It has several advantages for the territory.



#### An economic advantage:

- This dynamic sector, which is undergoing rapid change, generates local employment. It maintains activities and jobs in the heart of the city, and thus accentuates the dynamic and attractive nature of the territory.
- Urban logistics contributes to the development of new activities such as short circuits of local products, local shops integrated into the ecosystem (bulk, collection points, etc.), the circular economy, etc. It promotes cooperation and the creation of new collaborative schemes between economic actors (sharing economy).
- Like any economic sector, it contributes to local finances.



#### A social and societal advantage:

- Urban logistics is a springboard for employment: it tends to broaden the traditional field of logistics with a wide range of professions, some of them new, such as cycle logistics.
- It helps to integrate unemployed people and offer professional development (social and solidarity-based economy).
- It encourages the creation of social links (local shops can be collection/return points, etc.).
- It responds to the needs of citizens in terms of quality and proximity (proximity to the place of purchase, ease of purchase, etc.).

#### FOR MORE INFORMATION

Report: "LUD Mission" on Sustainable Urban Logistics Jean-Jacques Bolzan, Anne-Marie Idrac, Anne-Marie Jean, Government of the French Republic, with the support of the DGE and the DGITM, 2021

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Urban logistics is a source of integration and employment, and is an opportunity for local players to create new activities and collaborations."





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APPENDICES

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## A RECENT LEGISLATIVE AND REGULATORY FRAMEWORK

	Context	Consequences for urban logistics
LTECV	The 2015 Law on Energy Transition for Green Growth in France (LTECV) aims to improve air quality through several levers: creating logistics spaces, developing shifts in transport modes (rail, river), developing alternative form of motorisation and increasing the occupancy rate of goods transport vehicles.	This law, for the first time, mentions the subject of urban logistics spaces and the need to improve the occupancy rate of vehicles through better organisation of flows.
LOM	Promulgated in December 2019, the French Mobility Orientation Act (Loi d'Orientations des Mobilités - LOM) sets out guidelines that directly impact urban logistics. In particular, the LOM encourages innovations in mobility (shared transportation, outlines the criminal liability regime for autonomous vehicles, etc.) and requires the use of Low Emission Zones (Zones à Faibles Emissions - ZFE) when air quality standards are not met.	The LOM is pushing local authorities to change regulations in favour of soft and innovative mobility.
CLIMATE AND AND RESILIENCE ACT	Article 119: "All urban areas with more than 150,000 inhabitants will be required to set up a low emission zone (ZFE-m), i.e. 33 new ZFE-ms" by 31 December 2024. The act requires delivery platforms to use an increasing share of two- and three-wheeled motorised vehicles with very low emissions. From 2040 onwards, car manufacturers will no longer be able to market "new heavy vehicles [] using predominantly fossil fuels". The act offers the possibility of derogating from the height rules of the local urban plan for projects that demonstrate environmental exemplarity, as well as the possibility of derogating from the rules for construction projects or works carried out on a wasteland. The act also includes the objective of doubling the share of transport modes of rail and waterway freight by 2030.	The climate act is more ambitious than the LOM, and imposes a timetable for the implementation of ZFEs and the end of the construction of vehicles using fossil fuels. It also offers more flexibility to logistics property projects and encourages the reuse of wastelands.
LUD REPORT	The LUD mission for "Sustainable Urban Logistics" was launched from January to June 2021 by the Directorate General for Enterprise, the Ministry for Ecological Transition and the DGITM. The document is built around 8 groups of proposals in which local authorities play a central role. It encourages local authorities to share their data (e.g. location of delivery areas), to secure land for logistics in urban planning documents, and to provide training on urban logistics issues.	The LUD report outlines a range of solutions that are within the reach of all parties involved. Their implementation will contribute to the deployment of sustainable urban logistics. Including the consumer is also a new element in the ministerial reports, yet a key factor for success.



### **Distribution channel**

**Appendices** 

LOGICITÉS

A set of actions to transfer a product to the final customer. Several stakeholders control one or more links. Begins differently depending on how the end customer buys (on the internet or in a shop). Uses different routes to reach the customer (pick-up points, shops, home).

## Logistical decentralisation

Logistics platforms moving away from urban centres to the outskirts.

### Sustainable development

Economically efficient, socially equitable and environmentally sustainable development. Government intervention to combat transport-related pollution and disturbance has made sustainable development legislation mandatory.

## Omnichannel

A marketing strategy that aims to connect the various distribution and sales channels of a company's products, both physical and digital, in order to maintain contact with customers.

## **GLOSSARY**

### Pick-up point

A local business or service where delivery personnel drop off (and pick up) packages. Packages are delivered to a single point. This means less transport and parking time. The challenges are to increase retailer loyalty in dense urban areas, to anticipate peaks in activity and to manage the time taken by consumers to collect their packages.

## Urbanisation

A process, either accepted or suffered, which is characterised by the growth of cities. The growth of the urban population has considerably increased the demand for delivery activities closer to the customer.

## **Off-site stock**

Stock stored at the customer's premises but remaining the property of the supplier.







## **URBAN LOGISTICS, LAST MILE AND E-COMMERCE CONSULTANCY**

As an innovator in urban logistics solutions, Logicités brings an operational perspective to the transport of goods in cities, based on changes in consumption and public policies. Because the city is changing, because consumption is changing, Logicités imagines the transport of tomorrow's goods.

## A REAL ESTATE COMPANY DEDICATED TO LOGISTICS AND URBAN DISTRIBUTION

Meeting the needs of the end-users and making property a low-impact concept for the environment and society are at the forefront of our concerns. These principles ensure the sustainability of assets and maximise their value over the long term. We have a comprehensive view of property and development projects, whether they are located in the city centre, on the outskirts or in non-urban areas.

## ABOUT





