

# Urban Logistics Innovation Day

26 September 2023, Brussels



#LEADFinalConference  
#UrbanLogisticsInnovationDay

 [www.leadproject.eu](http://www.leadproject.eu)

 @lead-h2020

# Urban Logistics Innovation Day

26 September 2023, Brussels

## Welcome

Irene Blázquez Jiménez,  
EMT Madrid and  
Coordinator of LEAD



alice

Alliance for  
Logistics Innovation  
through Collaboration  
in Europe

**POLIS**  
CITIES AND REGIONS FOR TRANSPORT INNOVATION

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## Key-Notes



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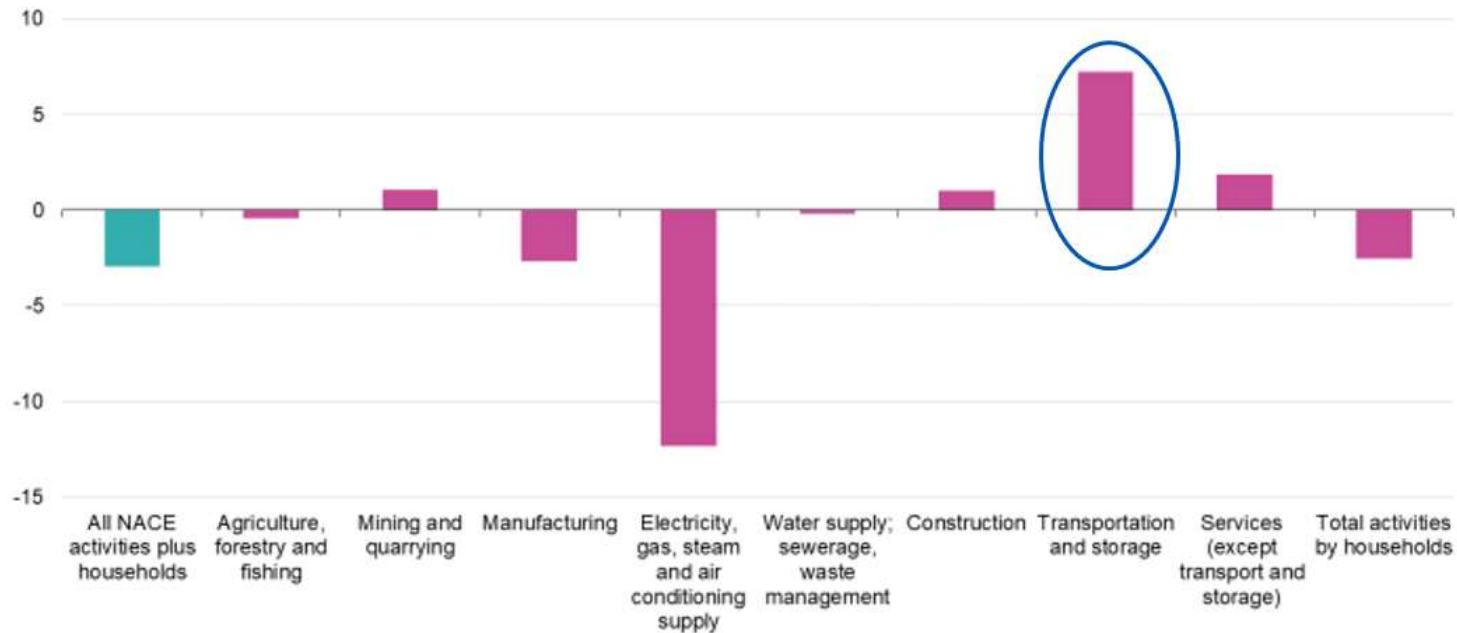
# The EU's Action for an Innovative and Sustainable Urban Logistics

Urban Logistics Innovation Day | 26<sup>th</sup> September 2023

Paola Chiarini  
Unit Innovation and Research  
DG Mobility and Transport

# EU economy GHG emissions: -3% in Q1 2023 - but not in transport!

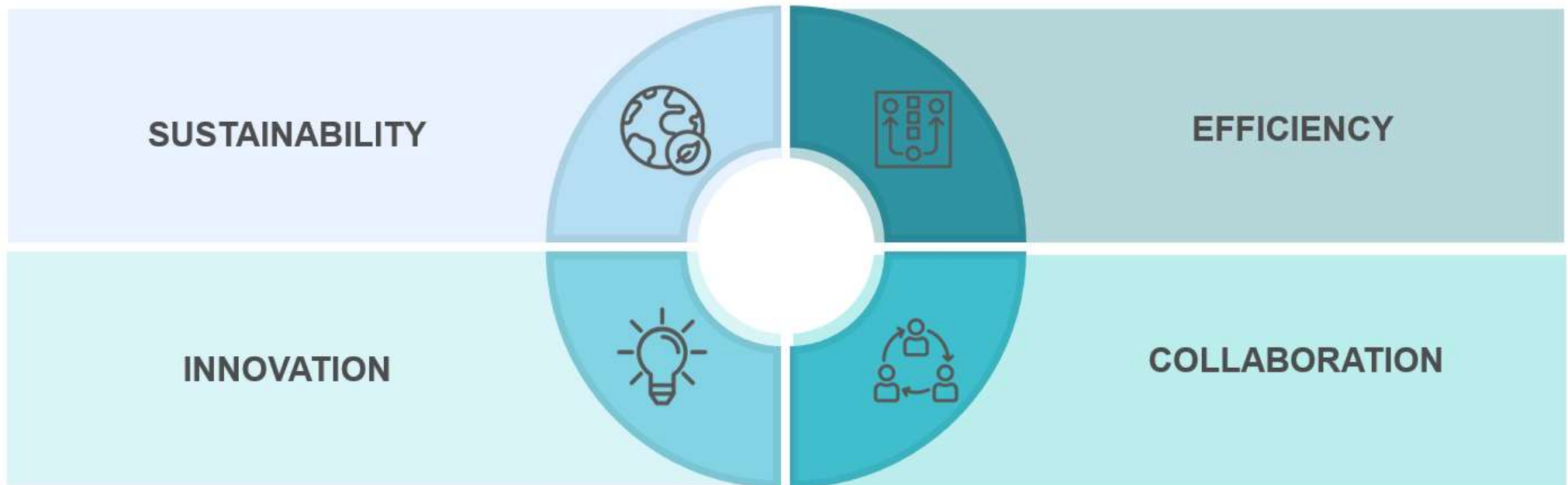
**Growth rates of greenhouse gas emissions by the economy, EU, Q1 2023**  
(% change compared with the same quarter of the previous year)



Source: Eurostat (online data code: env\_ac\_aigg\_q)

# Zero-emission city freight logistics and last-mile delivery

New EU Urban Mobility Framework and other initiatives



# How to fund the green smart transition?

## HORIZON EUROPE: RESEARCH AND INNOVATION

over 220 ml€ to logistics  
since 2014 (H2020 and  
HE work programmes)



### **EU Mission Climate-Neutral and Smart Cities**

Putting R&I results into concrete solutions together with cities, new forms of governance, collaboration and citizens' engagement



### **European Innovation Council WP 2024**

EIC Accelerator (Challenges & Open) for innovation actions and scaling up (e.g. digital twins, intelligent transport systems)



### **EIT Urban Mobility**

from research to application - Sustainable city logistics

**CONNECTING EUROPE FACILITY:** DEPLOYMENT (e.g. Alternative Fuels Infrastructure Facility call)

**EUROPEAN URBAN INITIATIVE:** funding innovation in cities, capacity building, experience exchanges

**INTELLIGENT CITIES CHALLENGE:** become an expert, engage with funded cities

... and more



# Urban Mobility Days 2023

- **4-6 October 2023, Seville, Spain**
- Unique interactive forum for policymakers, national, regional and local authorities, academics, NGOs, urban transport practitioners and industry representatives
- **Session Urban Logistics: Delivering Sustainability on Time**  
5 October, 14.15-15.30

[https://transport.ec.europa.eu/urbanmobilitydays\\_en](https://transport.ec.europa.eu/urbanmobilitydays_en)



Sevilla.



#UMD23 #UrbanMobility



# Thank you

Paola Chiarini

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# Managing Urban Logistics in Madrid

**Pedro Fernandez**

**Head of Department**

General Directorate of Mobility  
Planning and Infrastructure

Urban Logistics Innovation Day  
September, 26 2023

 | MADRID

**MADRID**



# MADRID

Madrid: 3.3 million inhabitants and 6.8 million at a regional level. 21 districts (128 neighborhoods).

Second most populated Functional Urban area in the European Union.

Key role in the country's economy (12% of total GDP).

Belonging to 2 TEN-T corridors.





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# In 2019 the Madrid 360 Strategy was presented to comply with the European Directive on Air Quality...

City		Mobility			Administration	
 Electrification	 New infrastructures	 Public transport promotion	 Multimodal integration and innovation	 Limitations for the more polluting vehicles	 Renewal and improvement of the regulatory framework	 Grants for infrastructure renewal
 Circular economy and waste management	 Green Infrastructures	 To boost the bicycle use	 Urban Goods Distribution(UGD)	 Pedestrian areas	 Energy efficiency and sustainability	 Study and follow-up on the measures



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# A thorough analysis of the urban logistics system found ...



- Urban Logistics accounts for **15 - 20%** of traffic
- E-commerce has **doubled** during the covid pandemic
- In **more than 65%** of establishments operations take place on the street (non-regulated areas)





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# The Madrid 360 SUMP includes 10 strategic axes, 32 measures and 121 actions ...



## 7. Promoting technological change and optimizing urban logistics

- Promotion of microhubs for sustainable last-mile delivery
- Creation of lockers for e-commerce in intermodality hubs
- Smart reserve system for loading and unloading
- Encouraging the shift to cleaner vehicles
- Restriction of access for polluting vehicles (LEZ)

# Adaptive last-mile, low-emission logistics in support of the on-demand economy through "digital twins."



1

**Innovative  
business  
models**



2

**Agile freight  
storage and  
distribution**



3

**Low emission  
delivery  
vehicles**



4

**Smart data-  
driven logistics  
solutions**



# Micrologistics hub in Plaza Mayor



- Urban logistics operations are carried out by a 100% electric fleet
- Cargo motorcycles and vans were especially adapted for urban freight distribution
- Capacity of cargo motorcycle: 40 normal-sized packages



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# Micrologistics hub in Plaza Mayor



Environmental Sustainability – Madrid 360 Strategy





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## Micrologistics hub in Plaza Mayor

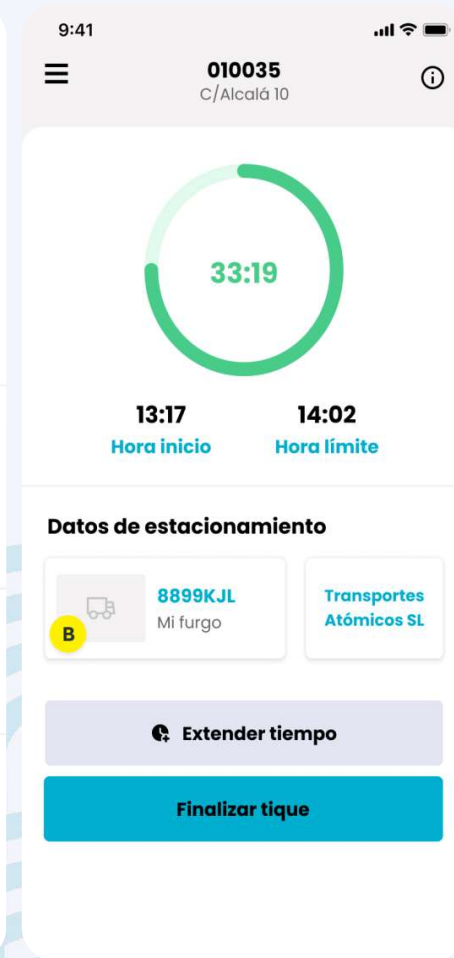
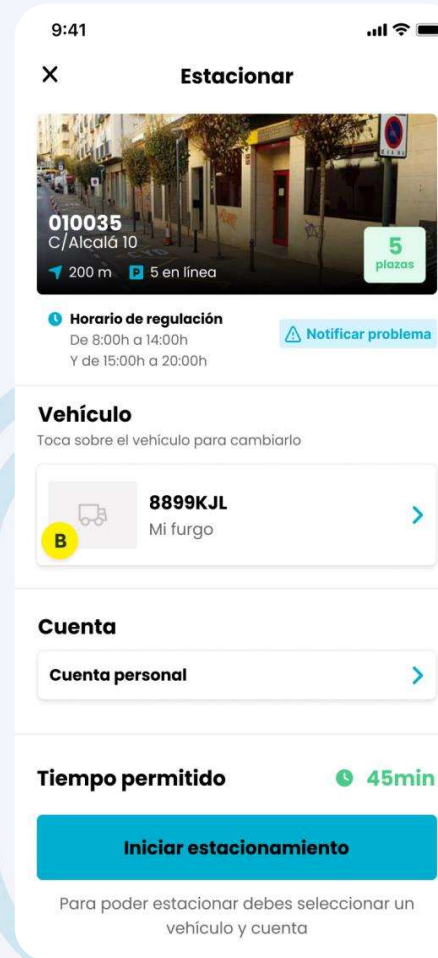
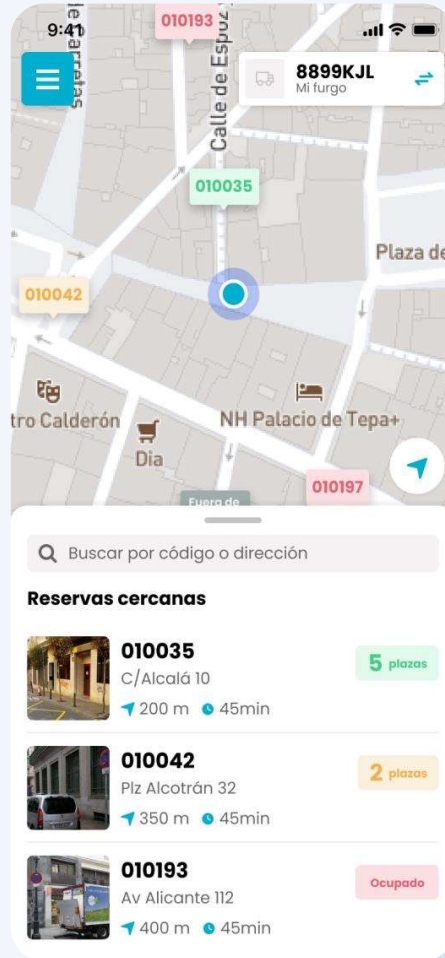


More details on the development and results of the LEAD pilot in Madrid will be shared throughout the day by my colleague Sergio Fernández.



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# Other actions: Smart reserve system for loading and unloading





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# In Madrid 360 all measures are intertwined and have to be aligned to reach a common goal



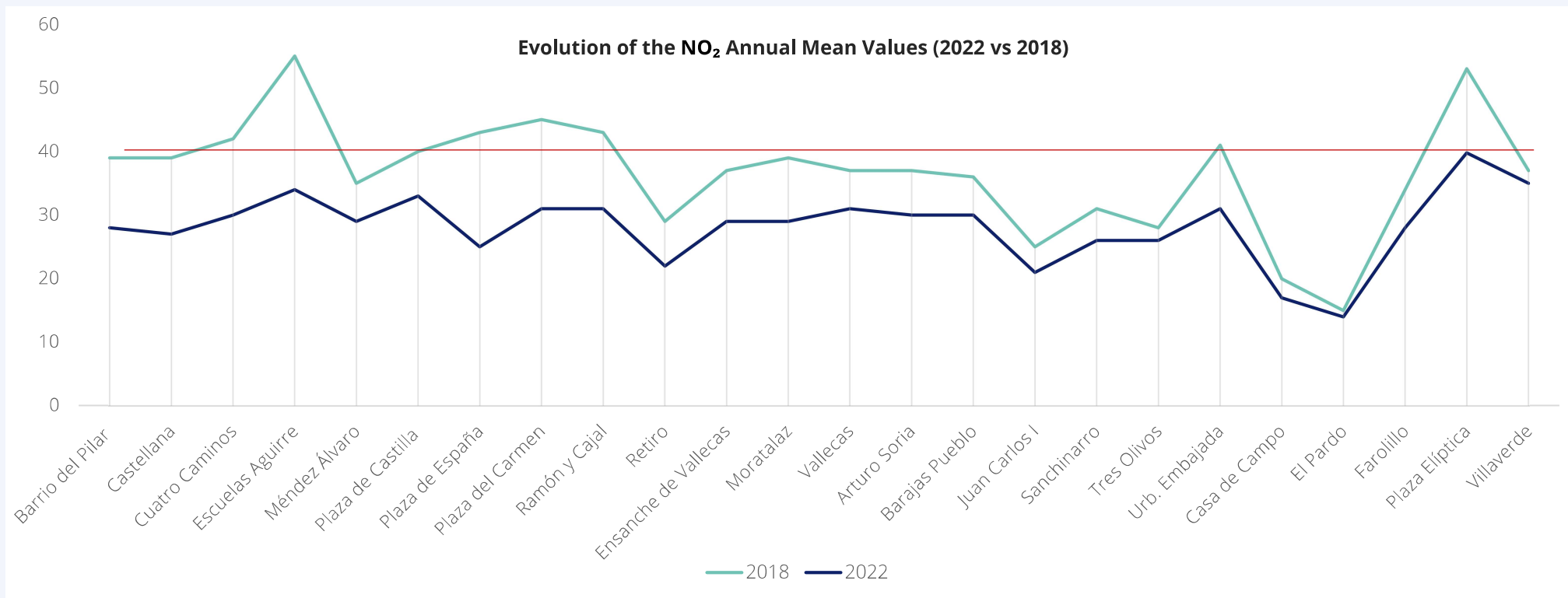
## 6. Stimulate the shift to cleaner vehicles (LEZ and SPLEZ)

- The central district Special Protection Low Emission Zone is in force since September 2019
- Restriction of access for polluting vehicles. Exception for residents and shopkeepers/operators in the Special Protection Low Emission Zone.
- The unauthorised access to the central district have been reduced by 40.6% from the prewarning period.



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# In 2022 Madrid complies for the first time with the European air quality standards





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## We are on the right track...

The city council of Madrid is completely aware of the importance of the **urban logistics system** for urban mobility planning and is currently pursuing two lines of action.

- 1 – We are currently developing a **SULP** to pick up where the SUMP left of
- 2 – We are currently participating in the project **UNCHAIN** to explore innovative solutions for curbside management and reverse logistics

Thank you for your attention !

Pedro Fernandez

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