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SPOTLOG

SPOTLOG - Green and Socially resPOnsible ciTy Logistics
InnovaTions

Reducing Emissions in Logistics & Providing Last-Mile Deliveries

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Outline

Last mile in Europe: Challenges

SPOTLOG indicator

Key messages

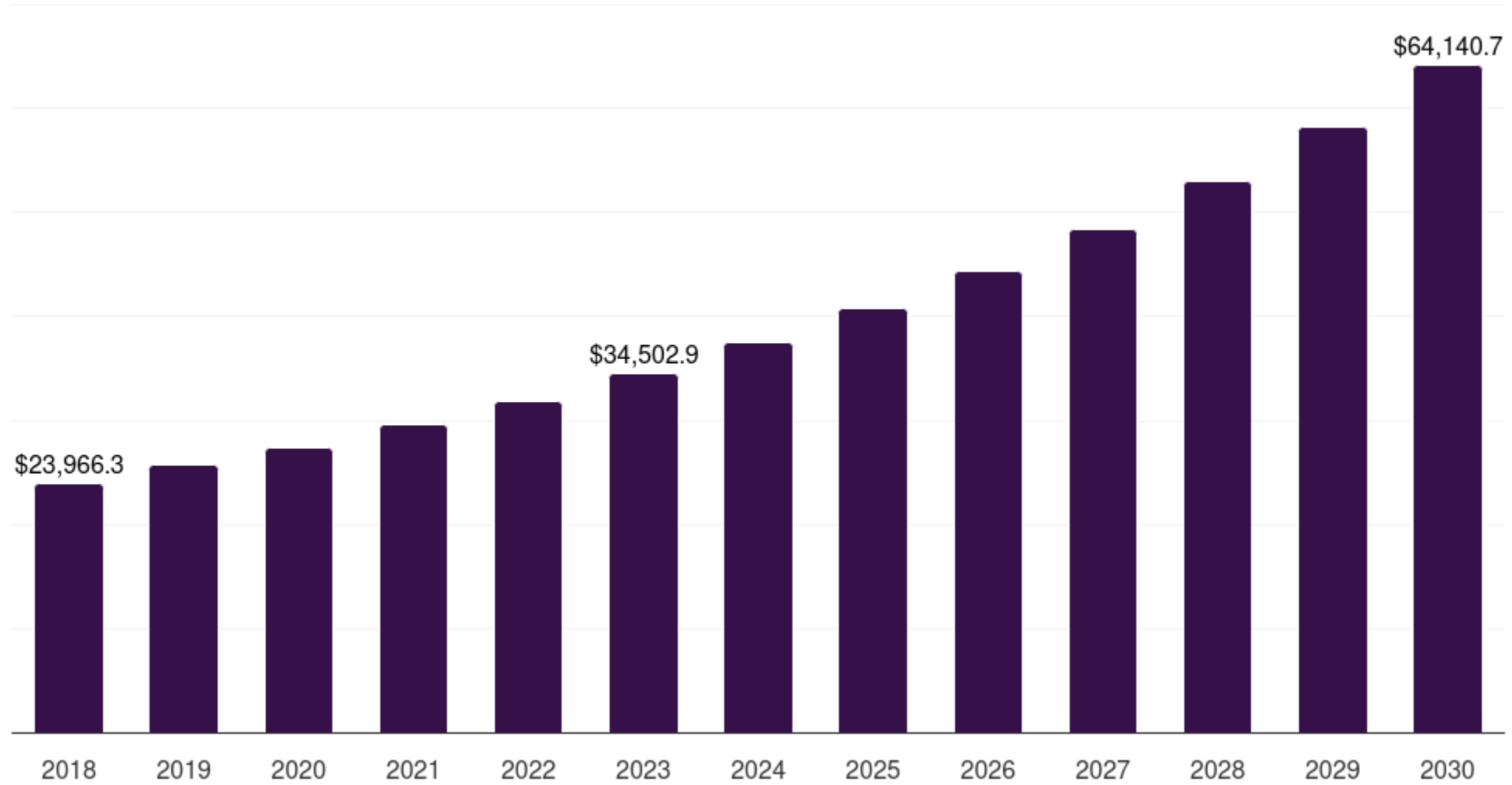
Last mile deliveries in Europe



Last-mile delivery has become a crucial aspect of e-commerce and logistics operations in Europe.



Unprecedented growth and challenges due to the surge **in online shopping and consumer expectations** for faster and more convenient deliveries.



Last mile deliveries in Europe



ACCORDING TO A REPORT BY PWC, THE MARKET IS PROJECTED TO NEARLY DOUBLE BY 2027 COMPARED TO 2022 LEVELS.



LAST MILE E-COMMERCE DELIVERY SECTOR COULD GENERATE CO2 EMISSIONS OF 5.5 MILLION TONNES IN 2032.



**SWITCHING TO ELECTRIC VEHICLES WOULD REDUCE THIS FIGURE TO 1.3 MILLION TONNES.
(NOT POSSIBLE – NOT ENOUGH)**

What do we want to avoid?

In cities

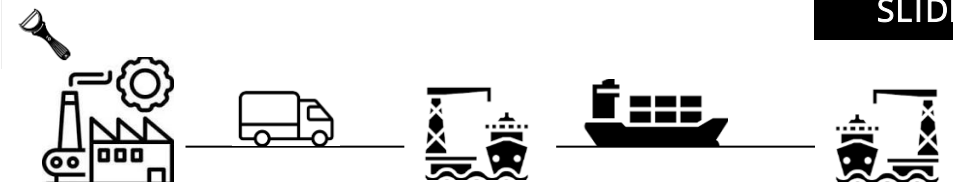


Definitely teleworking allows us to have more livable cities!, huh?

LOL

What do we want to avoid?

In rural areas




A



50 km



	Energy consumption	CO ₂ EF	CO ₂ very last mile (100 km)
Diesel	0.1 L/km	2.68 kg/L	26.7 Kg
Electric	286 Wh /km	295.8g/KWh	8,459 Kg
			-68%

A woman in a dark dress stands on a wooden balcony of a cabin built on a cliffside. The cabin has a red roof and glowing windows. The sky is a vibrant teal and blue, with a crescent moon, a small airplane, and a larger, glowing object. The background shows a range of mountains under a starry night sky.

But this colour
doesn't go with
the rest of the
cutlery!

Don't worry darling,
the return is free
and I will exchange
it for a lighter blue.

What do we want?



Responsible
behavior

Consolidation

Eco friendly modes

Optimization

Shared resources
(vehicles,
infrastructure,
services)

Regulation

SPOTLOG Regional Readiness Indicator for Sustainable Last-Mile Logistics

Objectives of the indicator



User-friendly assessment tool using a simple "exists or doesn't exist" response format



Sharing knowledge between project partners

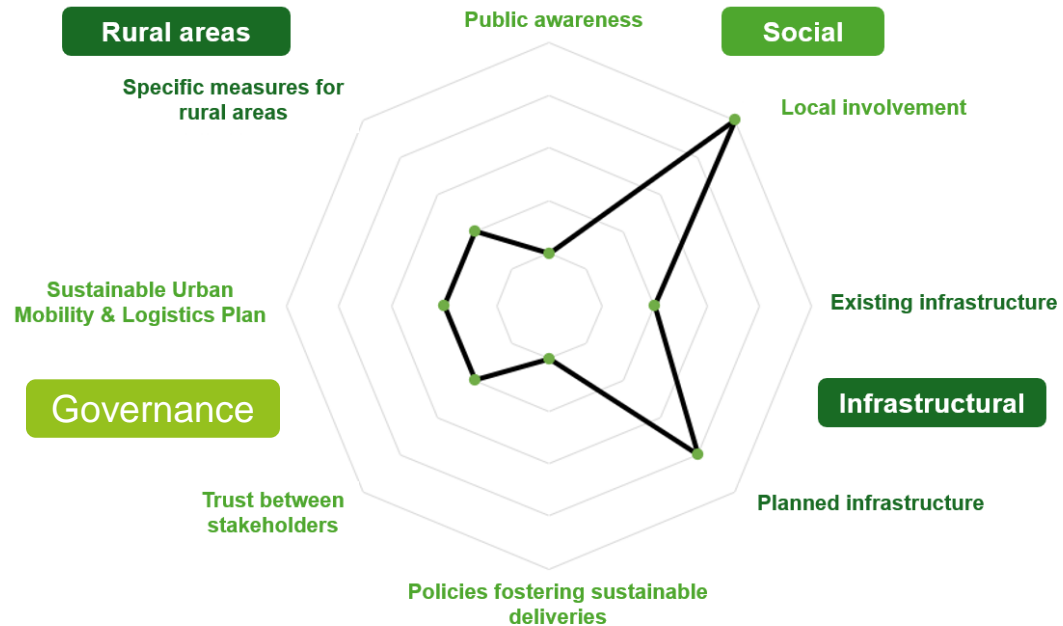


identifying good practices regarding innovative logistic solutions,



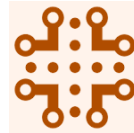
To understand the level of readiness of cities to implement sustainable last-mile deliveries systems

Topics addressed



Social:

- Public awareness,
- Local involvement.



Infrastructural:

- Existing infrastructure,
- Planned infrastructure.



Governance:

- Policies for sustainable deliveries,
- Trust between stakeholders
- SUMP & SULP



Rural

- Specific measures for rural areas

Social Public awareness

Description	Example	Checklist
Educational campaigns addressed to end-customers	Social media campaigns	
Engaging local community	Public forums, surveys	
Disincentivise rapid delivery	Pricing rapid delivery options, “last-mile” rate	
Promote sustainable logistics in companies	Financial incentives, environmental certifications	
Sustainable procurement requirements in public tenders	Use of low-emission vehicles and consolidated deliveries	



Social Local involvement

Description	Example	Checklist
Local commerce as pickup points	Provide support infrastructure	
Increase parcel lockers across the city	Establish a comprehensive parcel lockers network	
Parcel lockers policies formulated at an organizational level	Conduct feasibility studies	
Support crowdshipping strategies	Legal framework, incentives to participants	
Promote the use of public transport for crowdshipping	Policies to promote the use of public transport	



Infrastructural Existing infrastructure

Description	Example	Checklist
Public Urban Consolidation Centres (UCCs)	Operational micro hubs	
Public electric vehicle charging stations	Efficient network of charging stations	
Bicycle infrastructure	Bike lanes, cargo bike storage facilities	
Shared urban spaces for logistics	Integrating logistics infrastructure into mobility hubs	
Exclusive loading/unloading zones	Exclusive parking areas for logistic vehicles	



Infrastructural Planned infrastructure

Description	Example	Checklist
Public Urban Consolidation Centres (UCCs)	Operational micro hubs	
Public electric vehicle charging stations	Efficient network of charging stations	
Bicycle infrastructure	Bike lanes, cargo bike storage facilities	
Shared urban spaces for logistics	Integrating logistics infrastructure into mobility hubs	
Exclusive loading/unloading zones	Exclusive parking areas for logistic vehicles	



Governance Policies fostering sustainable deliveries

Description	Example	Checklist
Lower purchasing costs of low-emission vehicles	Direct subsidies, grants	
Promote night-time deliveries	Conduct pilots to understand its impact	
Road pricing	Fees for road use in order to reduce congestion	
Regulate vehicular access to urban areas	Establishing Low and Zero Emission Zones in urban areas	
Test new technologies	Conduct studies and pilot programs: autonomous vehicles, drones	



Governance Trust among stakeholders

Description	Example	Checklist
Implement pilots and testing programs	Call for projects, workshops, subsidies	
Create city platforms and forums	Discussion forums with public and private sector players	
Provide the means for companies to cooperate	Distribution platforms for flow exchange between carriers	
Develop data sharing platforms	Policies to facilitate collaboration between stakeholders	
Implement Smart Traffic Management systems	Optimize routes, reduce congestion, decrease delivery time	



Governance & Logistics Plan

Sustainable Urban Mobility

Description	Checklist
The existence of a SUMP	
The existence of a SULP	
If there is any level of integration between the SUMP and SULP	
If there is active implementation of specific SUMP and/or SULP measures	
If SUMP and/or SULP measures are monitored and evaluated	

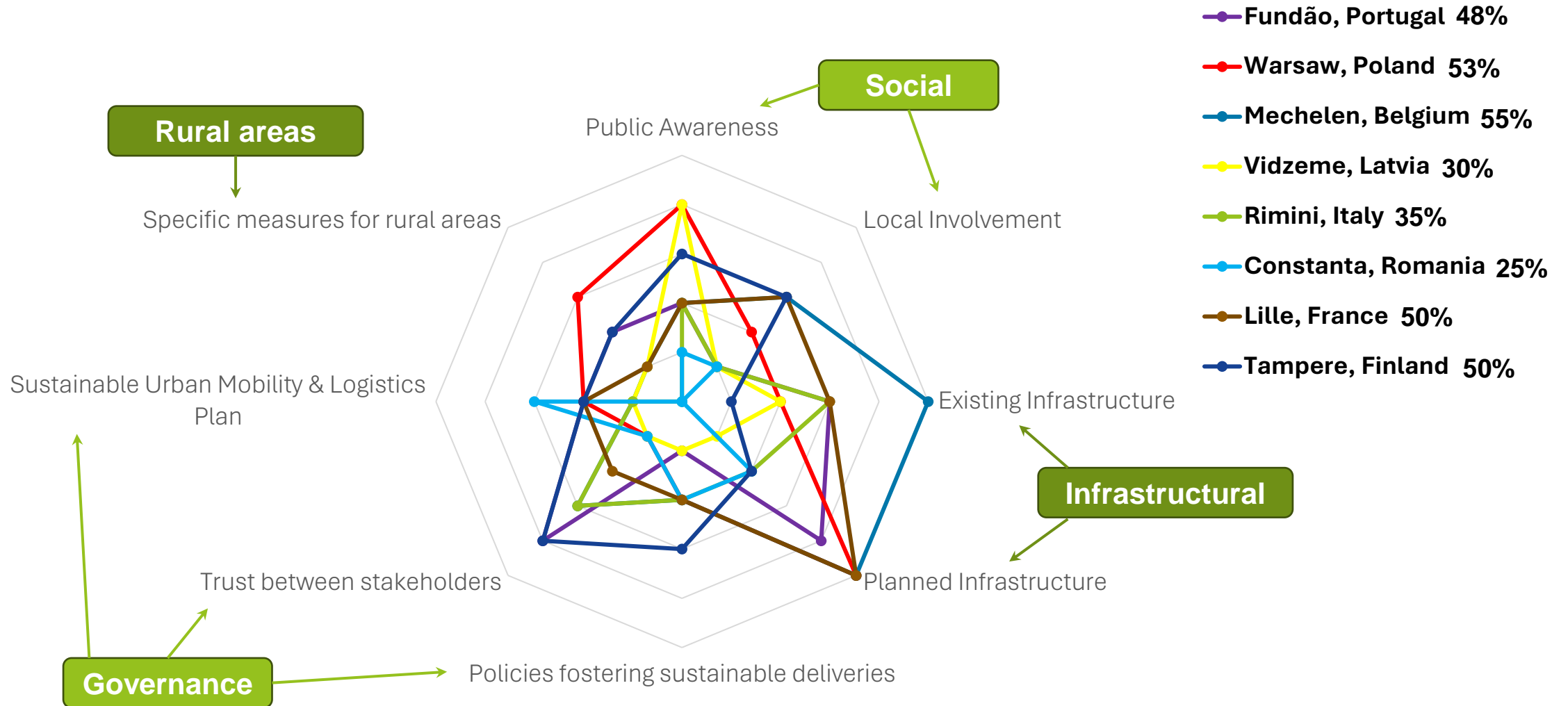


Rural facilitate rural last-mile deliveries

Description	Example	Checklist
SUMP and/or Sulp with measures to facilitate logistics in rural areas	Inclusion of measures to facilitate logistics in rural areas	
Use of community delivery points	Parcel lockers and pickup in hospitals, supermarkets, gas stations	
Promote delivery consolidation	Regulate the practice and promote collaboration between stakeholders	
Foster multimodal delivery	Develop support infrastructure, integrate delivery systems with local services	
Test innovative delivery solutions	Autonomous vehicles, drones, reverse DRT	



General results from SPOTLOG regions



Key messages

- **Integrated Planning:** Harmonize mobility, goods movement, and land use.
- **Public-Private Synergies:** Promote **consolidation** and foster collaboration between sectors.
- **Private Sector Synergy:** Encourage low-carbon solutions, **resource optimization**
- **Coherent Public Policies:** Align regulations across government and regional entities.

Thank you!

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