



The Sustainable Urban Logistic Plan of Almada: a brief synopsis

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Lisbon

Almada

Almada

Lisbon Metropolitan Area

Area 72 km²

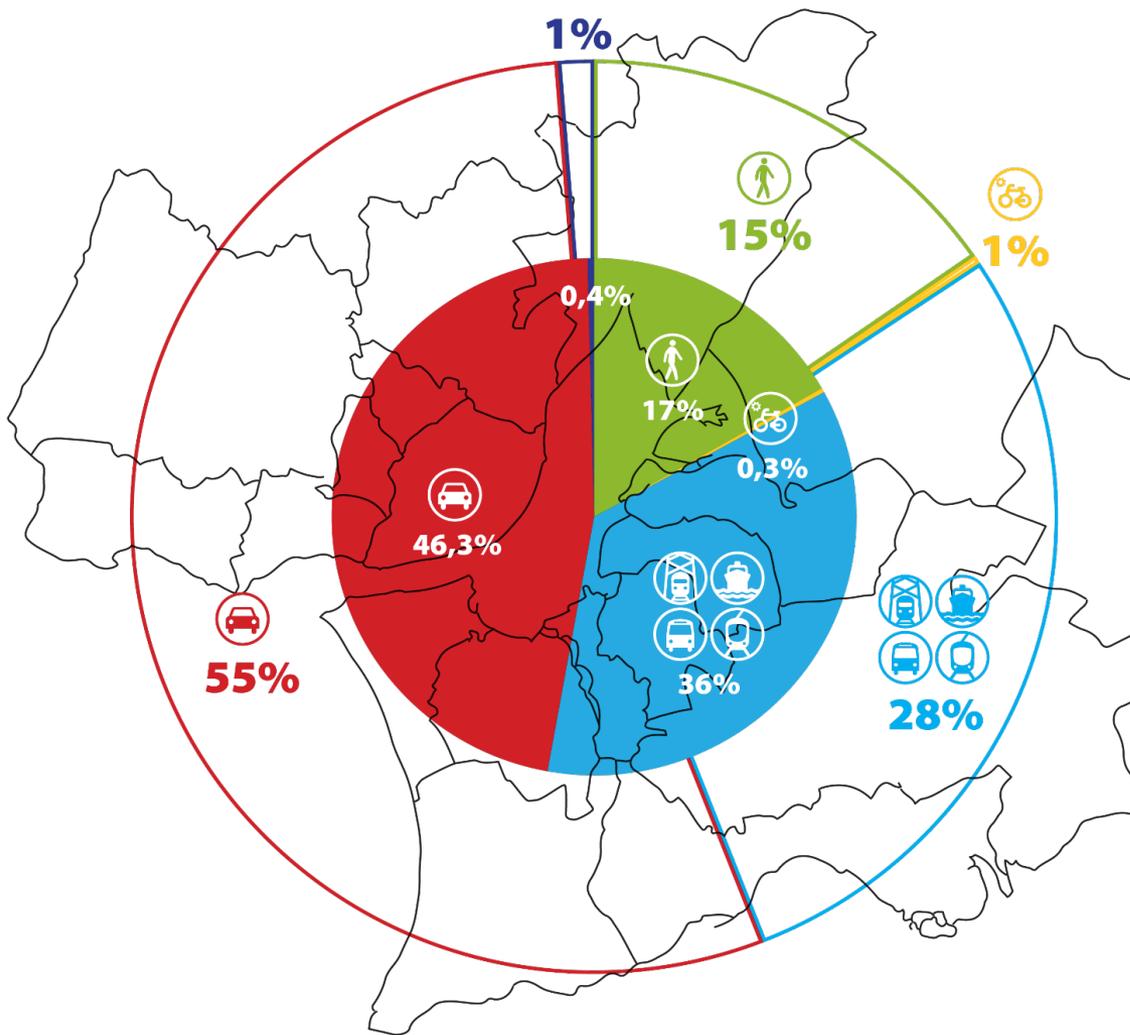
174 000 inhabitants

35 km long waterfront



Framing Almada's mobility

Modal split



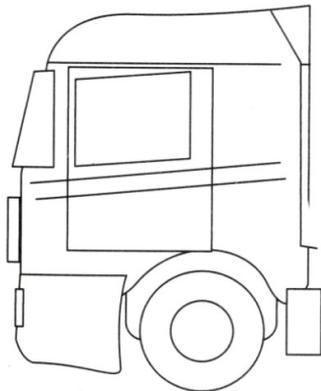
- Daily commuting trips still supported on car
- ▼
- Public transport services still lack capacity
- Intermodality needs improving
- Modal Split Car: 23% (1991), **49%** (2008), **46%** (2015)

■ Car ■ PT ■ Foot ■ Bike

Framing Almada's mobility

Urban Logistics

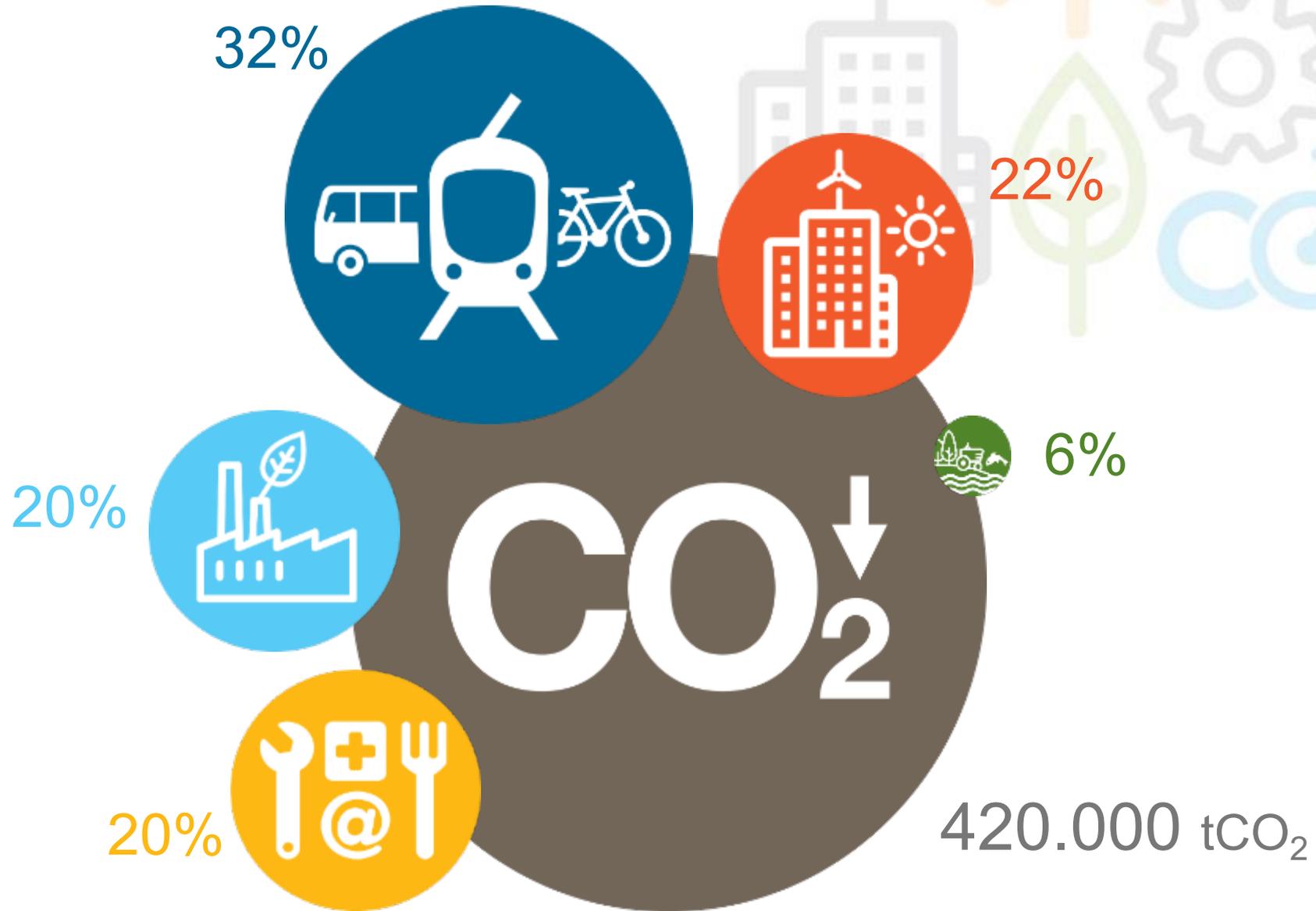
- **2 300 shops** in the City Center
- **1 550 logistic trips/day**
- **60 ton/day** of delivered freight
- **“Self running”** system
- **Energy and environmental impacts**
 - └ Noise pollution; Air pollution; High energy and consumption
 - └ Poor public space, taken by delivery vehicles and loading/unloading operation; Less quality areas for public leisure



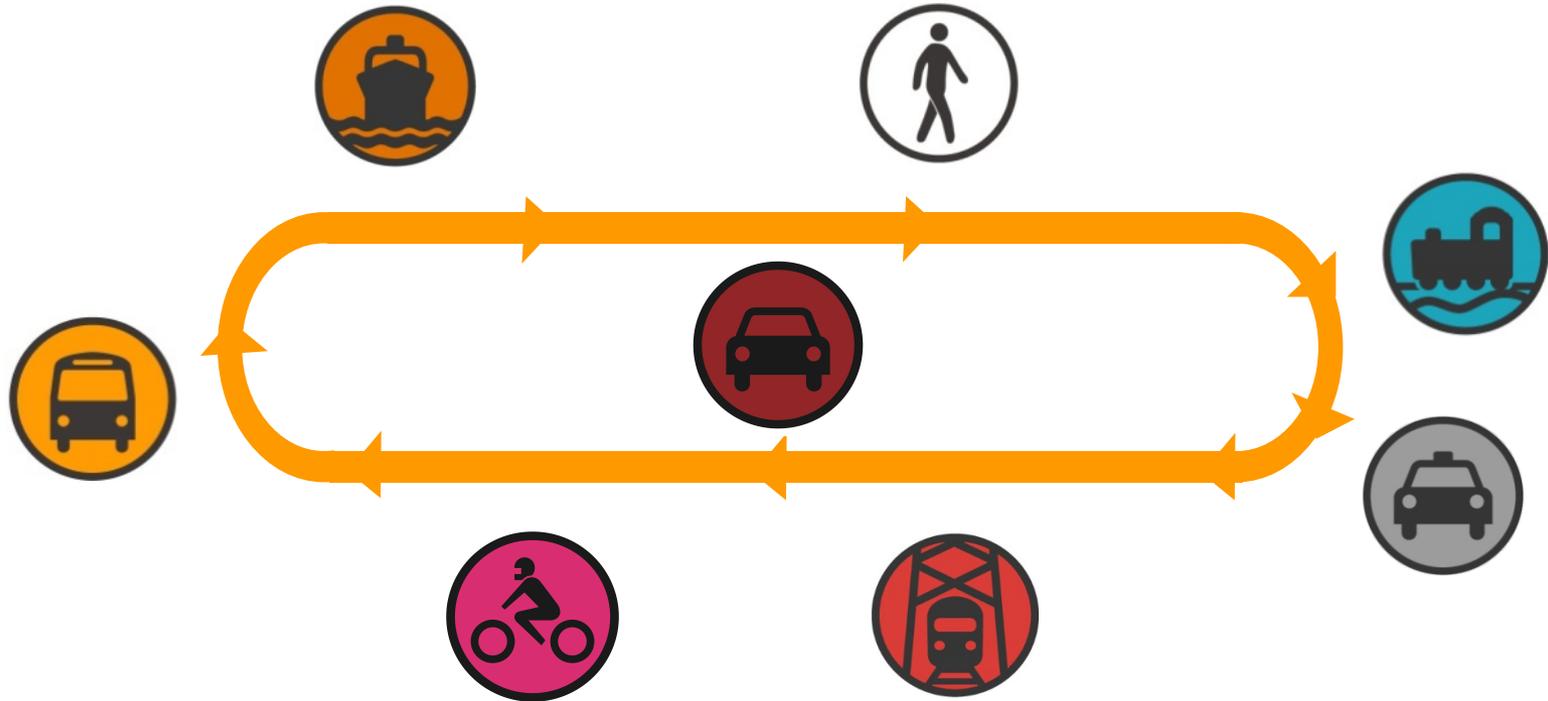
1 550

Number of **LOGISTIC TRIPS EACH DAY**
in the **City Center of Almada**

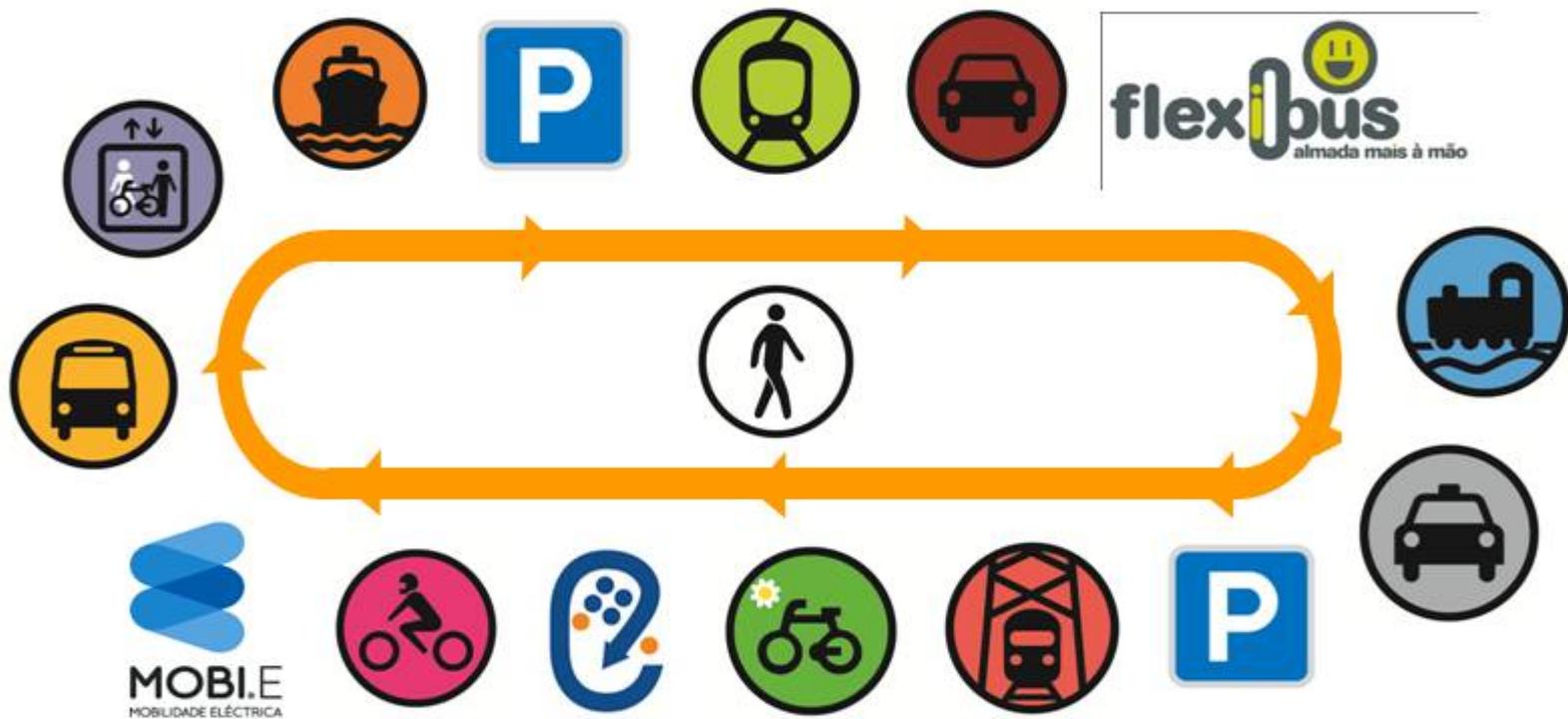




2001 Urban Mobility System in Almada



2015 Urban Mobility System in Almada



2015 Urban Mobility System in Almada



What is missing?

2015 Urban Mobility System in Almada



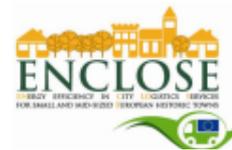
Urban Logistics was a key element missing in local mobility policies

What is missing?

Strategic Urban Mobility Plan of Almada, **PUMA** (2nd generation Urban Mobility Plan)

■ Domains of intervention

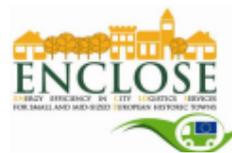
- ↳ PT network and services
- ↳ Soft Transport Modes
(integration with Almada's Cycling Plan)
- ↳ Circulation and parking management
- ↳ **Urban Logistics: Sulp**
 - **EU project ENCLOSE**
 - EU project DOROTHY



Co-funded by the Intelligent Energy Europe Programme of the European Union

Strategic Urban Mobility Plan of Almada, PUMA (2nd generation Urban Mobility Plan)

- **Domains of intervention**
 - ↳ **Urban Logistics: Sulp**
 - EU project ENCLOSE
 - EU project DOROTHY



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Logistics (transport and storage) represent **10 to 15%** of the **product cost**

Logistics weight for **13,8% EU GDP**



“Globalization” is Logistics...

How can we create an **efficient and reliable logistic chain** to ensure the transport and delivery of goods (many stakeholders, complex)

?

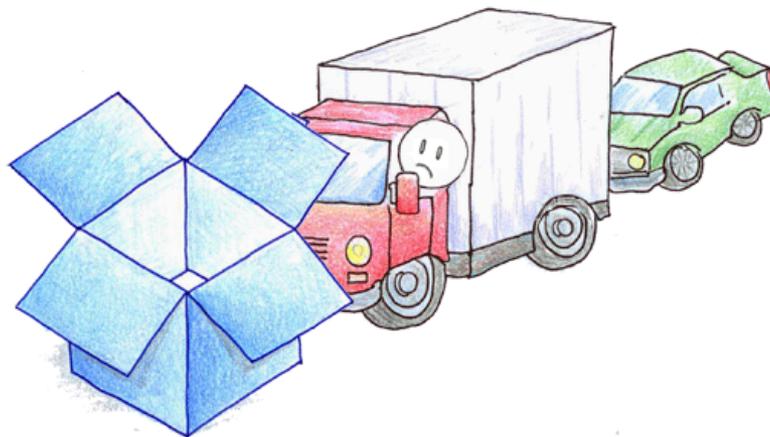
The importance of Urban Logistics

- Logistics are an **important component of the urban mobility system**:
 - ↳ Diversity of actors/stakeholders
 - ↳ Organized and developed (mostly) by private entities, but regulated by public entities (Local Governments)
 - ↳ Different types, needs and models of operation
 - ↳ Changing shopping habits in our global economy: e-commerce
 - ↳ Has important impacts in the quality of life and working conditions in our cities

The importance of Urban Logistics

- **Our challenge...**

Optimize logistic operations to enhance the attractiveness of the city and its quality of life and reduce traffic congestion, environmental impacts and energy consumption/GHG emissions from the daily logistic operations.

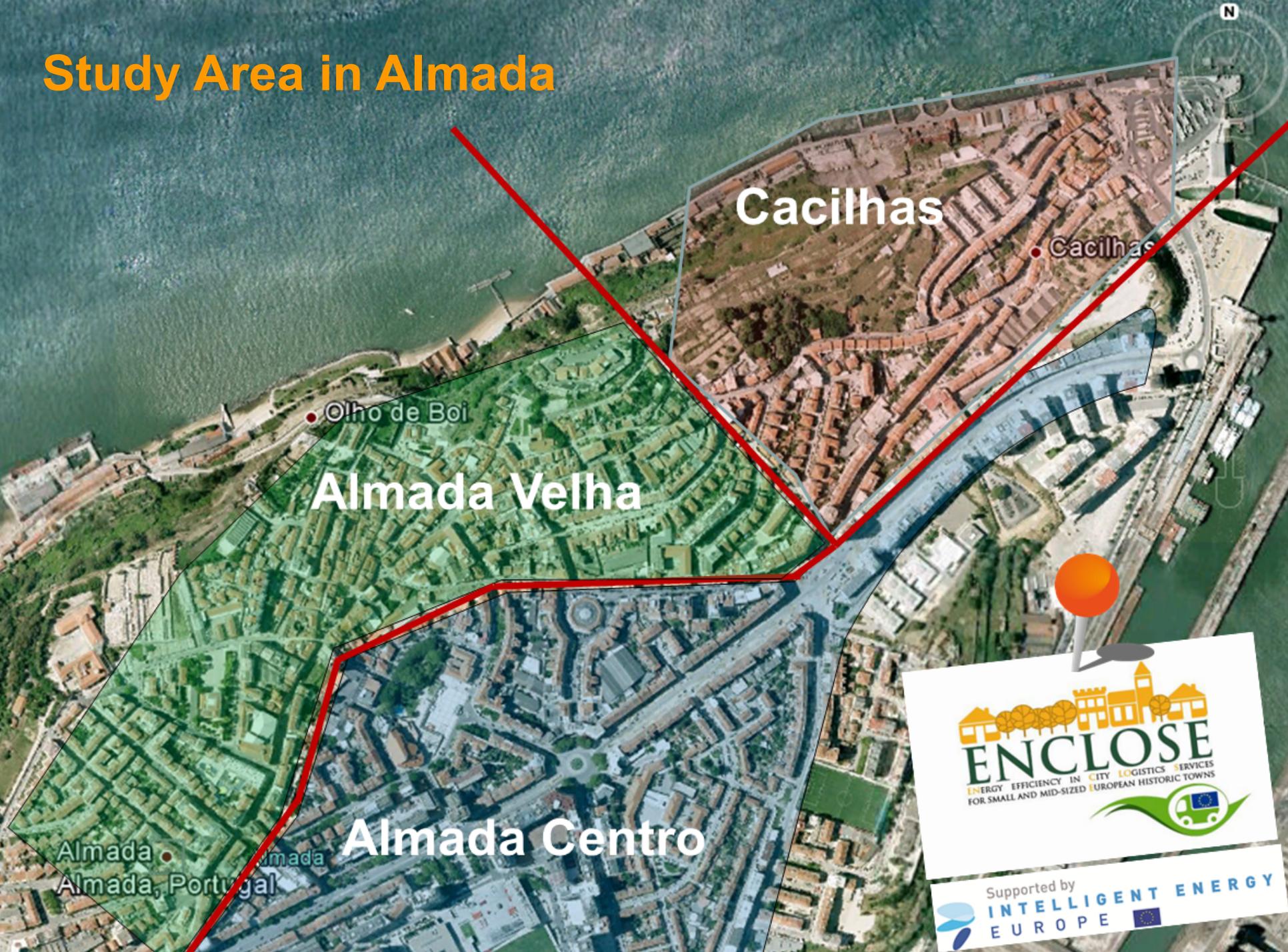


Urban Logistics in Almada

Almada's Sulp: structure and contents

- 1. Problem Statement (vision and objectives)**
- 2. Local context**
- 3. Local logistics context**
- 4. Setting the logistics baseline**
- 5. Logistic solutions identification**
- 6. Feasibility of chosen services/measures**
- 7. Hierarchy of services/measures**

Study Area in Almada



Cacilhas

Cacilhas

Olho de Boi

Almada Velha

Almada Centro

Almada
Almada, Portugal



Urban Logistics in Almada

Almada's Sulp: baseline

- **2 300 shops** in the reference area
- **1 550 logistic trips/day**
- **60 ton/day** of delivered freight
- Energy and environmental impacts of urban logistics
 - └ Energy consumption: **361 toe/year** ($\sim 15 \times 10^3$ GJ/year)
 - └ GHG emissions: **1 288 tCO₂eq/year**

Urban Logistics in Almada

Measures

- **Extension of new parking rules/regulations for commercial vehicles** to all the city
- **Pick-up point** utilizing existing facilities and final destination for E-Commerce goods
- **Tram for goods distribution** in the city centre
- **Bike cargo** (Organic cooperative + VeloCidade)
- **Reorganization of Almada's Central Market area**, including a “**Micro Consolidation Centre**”
- **UCC, Urban Consolidation Centre**

Urban Logistics in Almada

A glimpse of the future

Urban Consolidation Centre

- Platform for load consolidation
- Easily accessible and fairly close to the city centre (2,5 km)
- Added value:
 - └ Home delivery services
 - └ Special destination
 - └ Reverse logistics
 - └ Less costs for operators

