

# Transnational policy framework – Guidelines for energy-efficient cities

**Dr. Afroditi Anagnostopoulou**

**Dr. Maria Boile**

(Centre for Research and Technology Hellas /  
Hellenic Institute of Transport)

**Maria Poulou**

(Programming & Development Division /  
Municipality of Piraeus)



# Overview of the presentation

- The urban freight transport system
- Challenges
- SMILE Project
- Transnational policy framework
- Objectives and priorities
- Association matrix
- Results
- Lessons Learnt

# The urban freight transport system

Significant urban growth → Urban population to grow from 78% to 86% and from 47% to 64% in more and less developed regions respectively

Urban freight transport systems

Key role towards the economic vitality of the cities they serve

Correlate strongly with productivity and economic prosperity

Often plagued with major inefficiencies and negative externalities

Stemming from:

- Interaction and competing use of passenger and freight activities
- Limited capacity
- Lack of coordination
- Extended peak hours of operation

Resulting to:

- Increased congestion
- Delays
- Energy consumption
- Environmental impacts (noise and air pollution)

# The urban freight transport system

Passenger mobility → Necessity

Urban freight transport → **“Bad neighbor”** causing environmental problems and impeding the efficient movement of people

To improve efficiencies, reduce externalities and promote a better image of urban freight transport, several initiatives have been undertaken related to:

- Policy and regulation (infrastructure, facility, time or vehicle related)
  - ↳ May be achieved through restrictions (or their removal), pricing policies, exchange of information between public administration and those affecting the transport services, provision of services and other initiatives
- Infrastructure development
- Vehicle technology
- New and alternative energy sources
- Use of information and communication technologies
- Development and adoption of new efficient business practices

# Challenges

- Challenges to EU cities: reducing congestion, accidents and pollution



**Key issues:** greener towns and cities, smarter urban mobility and urban transport which is accessible, safe and secure for all European citizens

# SMILE Project

- SMILE project was well aligned with the general objective of promoting innovative energy efficient solutions for smart MED cities as it defined, planned, tested, shared and promoted public policies, strategies and measures for intelligent urban freight transport solutions, improving public and private actors' knowledge while imposing a direct energy saving impact to the cities.
- Innovative solutions were developed to rationalize and improve the efficiency of transport and also to promote innovative renewable energy use reducing energy consumption and associated GHG emissions.

  
**ΔΗΜΟΣ ΠΕΙΡΑΙΑ**  
 Municipality of Piraeus  
 (coordinator)

  
**Montpellier**  
 City of Montpellier

**AFT**  
 AFT

  
**Ajuntament de Barcelona**  
 City of Barcelona  
 Mobility Department

  
 Centre for Research and  
 Technology Hellas/ Hellenic  
 Institute of Transport

  
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**Smile**  
 SMART GREEN INNOVATIVE URBAN LOGISTICS  
 FOR ENERGY EFFICIENT MEDITERRANEAN CITIES

# Transnational policy framework

- A policy framework was developed and properly adapted to the strategic plans of each city addressing both strategic and specific needs and objectives
- Provide appropriate guidelines, taking into consideration the current situation, ensuring the successful implementation and applicability of the selected measures



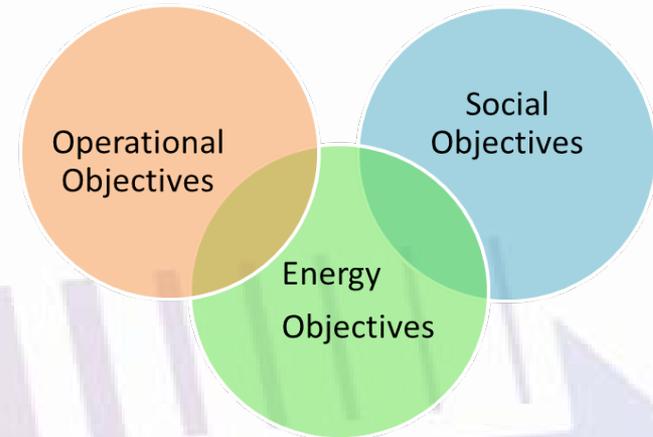
# Objectives and priorities (1/2)

- Local and regional authorities commit to establish long-term targets which reflect ongoing changes and the evolution of stakeholders' requirements.
- This commitment is shaped by becoming an integral part of the city's strategic objectives.
- Develop proper policies that are able to satisfy all stakeholders since they usually have competing interests and needs
- Special focus should be given on the energy objectives that form a basis of cooperation between industry and public authorities



# Objectives and priorities (2/2)

- The industries focus on the minimization of the operational costs in order to support their competitiveness and their economic activity.
- The public authorities aim to improve the quality of life improving public places, safety, air and noise pollution, and maximizing social welfare in general.
- Even if the relevant stakeholders have different objectives and priorities, an efficient urban freight system offers added value in terms of both operational and environmental costs.



**Energy objectives could be the catalyst to build the dialogue between industry and public authorities opening the road for synergies and expanding the cooperation network**

# Association matrix

- A basket of measures is selected for each city based on the assessment of the needs and the characteristics of the area capitalizing on existing urban freight data, policies, critical success factors and previous experiences and also, using a systematic energy-related information guide to aid in gaining knowledge for the state-of-the-art energy-efficient measures.
- Provide appropriate guidelines, taking into consideration the current situation, ensuring the successful implementation and applicability of the selected measures



# Results

- Action plans of participated cities including pilot implementations
  - ✓ Piraeus city (technical support by CERTH/HIT): Development of on the road parking bays for loading/unloading supported by ICT tools for real time information and management
  - ✓ Piraeus city (technical support by CERTH/HIT): improvement of the garbage collection system for efficient Municipal Solid Waste management
  - ✓ Barcelona city (technical support by CENIT): Development of an urban consolidation center utilizing electric vehicles
  - ✓ Valencia city (technical support by VPF): Development of an urban consolidation center utilizing electric vehicles and enhancement of marketing tools for efficient urban logistics
  - ✓ Rijeka city (technical support by REA KVARNER): Restricted zones enforcement using ICT tools
  - ✓ Montpellier city (technical support by AFT): Development of an urban consolidation center utilizing electric vehicles and promotion of the Objective CO2 initiative to urban freight transport operators

# Lessons learnt

- The outcomes of energy efficient measures and policies go beyond short-term benefits and have the potential to accommodate anticipated economic growth in the urban area mitigating the related environmental impacts.
- Sustainability awareness has evolved and strengthened over the years, becoming the core of the strategic objectives that drive public authorities and industry.
- The commitment to sustainable development could be reflected in the integration of economic decisions with their related social and environmental impacts.



Thank you!

Questions?