# LIFE Programme

The LIFE programme is the EU's funding instrument for the environment and climate action. Main objectives are: to contribute to the shift towards a resource-efficient, low-carbon and climate-resilient economy, to the protection and improvement of the quality of the environment, to improve the development, implementation and enforcement of Union environmental and climate policy and legislation. LIFE began in 1992 and since then has co-financed more than 4500 projects. For the 2014-2020 funding period, LIFE will contribute approximately €3.4 billion to the protection of the environment and climate. The European Commission (DG Environment and DG Climate Action) manages the programme and has delegated the implementation of many components to the Executive Agency for Small and Medium-sized Enterprises (EASME).

# The Consortium

It is composed by six partners coming from three different European countries (Italy, Croatia and Sweden). **Città di Lucca** is the coordinating beneficiary.

Three technical associated beneficiaries, from Italy, will support the Municipality in the development of the project. **KIUNSYS** is one of the main players in the Smart Mobility market and ITS industry in Italy; **LUCENSE** is a non-profit limited liability consortiumlike company working on different topics such as R&D, industrial research, technology transfer. **MemEX** is an independent engineering consultancy company composed by experts with a high level of experience on Logistics systems and services, Urban Mobility and Public Transport. **Grad Zadar** and **City of Stockholm** will be involved in order to evaluate the replicability and transferability of LIFE ASPIRE approach, measures and eco-sustainable services.



COORDINATING BENEFICIARY

LUCCA MUNICIPALITY

CONTACTS

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ASPIRE

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ADVANCED LOGISTICS PLATFORM WITH ROAD PRICING AND ACCESS CRITERIA TO IMPROVE URBAN ENVIRONMENT AND MOBILITY OF GOODS

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#### The Project

LIFE ASPIRE aims to achieve real improvements of air quality in the urban area of Lucca by demonstrating new city logistics policies, services and enforcement measures that lead to a significant reduction of traffic congestion and emission of freight vehicles in city centre.

LIFE ASPIRE will define and implement a "credit based" access policy allowing flexible road pricing criteria related to the last mile goods delivery: a dedicated management platform, two innovative services (Loading/Unloading Bays and Cargo-bike sharing stations) and the improvement of the existing Limited Traffic Zone access control system that are the main elements of LIFE ASPIRE actions.

The demonstration activities in Lucca will be complemented by the replicability and transferability analysis of the implemented measures and services to the towns of Zadar - Croatia ("Peninsula" historic area) and Stockholm - Sweden ("Gamla Stan" historic centre). However, the solutions that will be identified can be widely transferred and applied in other urban contexts with similar characteristics and problems.



## Make sustainable city logistics

The awareness of the impacts of urban freight transport on European towns has reached momentum. Urban freight transport is responsible for 20% of freight transport CO<sub>2</sub> emissions despite freight vehicles represent only 12-15% of total urban traffic. Although significant efforts are made in EU cities, the need of accelerating and spreading the implementation of more sustainable urban logistics solutions has become urgent. According to this, Access Control Systems to the Restricted Traffic Zone (RTZ) represents one of the main tool for reducing traffic congestion and for implementing enforcement policies in urban areas. In general, the related ICT infrastructures are nowadays installed in EU towns and are available for the application of specific enforcement control schemes, aimed at reducing the negative impacts of last mile logistics.

#### Lucca: demonstration site

LIFE ASPIRE will be implemented in Lucca historic city centre within the RTZ. Lucca represents a typical European town of mid to small dimensions, with problems related to city logistics: air quality impacts - CO<sub>2</sub> and "secondary pollutants" emissions, PM<sub>10</sub>, noise, energy consumption, etc. As well known, these aspects have serious negative effects on health and well-being of the population, in particular on the most vulnerable citizens (i.e. children, elderly people). LIFE ASPIRE project aims to achieve real improvements of air quality in the urban area of Lucca by demonstrating new city logistics policies, services and enforcement measures that lead to a significant reduction of traffic congestion and emissions of freight vehicles in city centre. The ultimate goal, in the case of Lucca, is in fact to reduce environmental impacts of freight transport in the historic city centre and to stimulate a transformation of the local freight transports system by paving the way to more eco-sustainable logistics practices compared to the ones currently used.

## **Expected results**

Reduce the current levels of freight traffic by decreasing the total number of commercial vehicles in last mile deliveries operations in the inner historic centre of Lucca (in particular in the RTZ).

Reduce the current levels of environmental pollution due to commercial vehicle emissions.

Reduce the related energy consumptions and noise pollution.

Reduce risks for historic buildings due to vibrations resulting from heavy traffic.

Improve the safety for pedestrian.

Promoting the adoption of low/zero emission vehicles by transport operators.

Foster the transport operators to use logistics services provided by certified logistics and consolidation centres thanks to the new enforcement and access policy.

Provide new eco-logistics services for transport operators in last mile deliveries (Load/Unload Bays and Cargo-bike Sharing), both managed by the innovative platform.

Improve the urban environment and, consequently, the quality of life for residents, visitors and tourists.