



## About ARCHIMEDES

ARCHIMEDES is a large-scale demonstration project in the EU CIVITAS programme, bringing together 6 cities across Europe to address problems and opportunities for creating environmentally sustainable, safe and energy-efficient transport systems in medium-sized urban areas.

The objectives of the ARCHIMEDES project are to introduce innovative, integrated and bold strategies to achieve significant impacts in pollution reduction, safety improvement, accessibility and mobility enhancement.

An ambitious blend of policy tools, research and measures will increase energy-efficiency in transport, provide safer and more convenient transport systems for all, using a higher share of clean engine technology and fuels, resulting in an enhanced urban environment (including reduced noise and air pollution).

The ARCHIMEDES project partners will demonstrate strong and coherent packages of measures, integrated within each site, to maximise the synergistic effects of safe and energy-efficient transport measures, assessed through robust evaluation approaches.

The ARCHIMEDES project will achieve its aims by focusing on demonstration activities in specific innovation areas of each "lead" city, known as the CIVITAS corridor or zone.

- The project will promote the understanding and take-up of an integrated package approach to other cities aimed at stimulating more sustainable management of modes, energy sources and cleaner transport technologies
- A focus of national level dissemination, using existing networks of which the cities are members, will enable a know-how transfer close to small and medium cities which can sometimes be far from the latest developments in Europe.
- Exploitation activities in ARCHIMEDES will involve facilitating development of strategies for exploiting the results of the project.

Finally, education is considered as a prime motivator for participation by the cities in the ARCHIMEDES project. Promotion, training events and educational exchanges between students, citizens and stakeholders in the project, provide the greatest opportunity for wide-scale impacts in European cities. The learning cities will elaborate a Sustainable Urban Transport Plan.

## The Cities

### Aalborg

The Municipality of Aalborg consists of both urban and rural areas with a total area of some 1,100 square kilometres. The city itself has approximately 130,000 inhabitants while the remaining part of the 200,000 inhabitants lives in the outskirts and in the rural areas. The municipality is responsible for a road network of approximately 1,900 kilometres and the municipality is the 3rd largest in Denmark. The City of Aalborg will implement the CIVITAS measures in a corridor of 53 square kilometres between the City Centre and the main university campus in the south-eastern part of the built-up area.

### Brighton & Hove

Brighton & Hove is a historic city, known internationally for its abundant Regency and Victoria architecture. It is also a seaside tourist destination, with over 11 kilometres of seafront attracting eight million visitors a year. In addition, it is also home to two leading universities, a major regional shopping centre, and home to some of the area's major employers, with a population of 250,000 residents. The measures planned for Brighton & Hove will focus on the city centre to the peri-urban fringe in the north along the major vehicular routes into and out of the city.

### Donostia San Sebastián

The city of Donostia - San Sebastián has 184,000 inhabitants and is located in a metropolitan area with around 400,000 inhabitants. The territory of the municipality is some 60 square kilometres. The CIVITAS measures are concentrated on the main east-west and north-south corridors. The CIVITAS innovation zone has 105,000 inhabitants and contains the major part of the retail and service sectors of the metropolitan area.

### Iasi

The City of Iasi is located in the east of Romania, and is the second largest city in the country, after Bucharest, with a population of 366,000 inhabitants. The city has 8 universities with approximately 60,000 students, the second largest such population in Romania. This creates a large number of journeys along the main corridor, served by public transport route "8" (Complex Tudor Vladimirescu - Copou) with an approximate length of 10 km. The City of Iasi will implement its integrated measures in this innovation area to be known as the CIVITAS Plus Corridor.

### Monza

The City of Monza, with approximately 123,000 inhabitants, is located 12 km north of Milan, which is the leading centre of the Lombardia area. Monza is affected by a huge amount of traffic, as it is an important node on the highway and railway networks. The objective of Monza in participating in CIVITAS is to set up an Urban Mobility System where the impact of private traffic can be reduced, creating a new mobility offer where alternative modes become increasingly significant, leading to improvements to the urban environment and a reduction in energy consumption.

### Ústí nad Labem

Ústí nad Labem is an important centre of north-west Bohemia in the Czech Republic, with a population of 94,000 inhabitants, living in an area of 94 square kilometres. It was the former base for a large range of heavy industry leading to damage to the natural environment, which is now a major focus of improvement and care. The city counts eight faculties and a large student population. The Transport Master Plan is the basic transport document for the following development of the new urban plan (2011), which has to be developed by the City subject to the provisions of the newly adopted Building Act.

## The measures

Out of a total of 83 measures to be implemented in the 6 cities between 2008 and 2012, 20 measures have been selected as focus measures.

In **Aalborg**, 100 vehicles using at least 10% bio-fuels will be made operational, and the development of local bio-diesel supply infrastructure will be organized. A Cycle Motorway, including traffic signals, dedicated cycling lanes, signposting, shortcuts, sheltering and safety measures will be developed. Aalborg will also implement an Environmental Zone, with specific restrictions on certain HGV vehicles, to efficiently manage freight logistic. Measures will also monitor and reduce congestion.

In **Brighton & Hove**, 10 Electric Vehicle Charging Points will be installed in the CIVITAS innovation area and an Environmental Zone aims to improve air quality in the city. Transport telematics will be developed through a personalised travel information website, and public transport information for visually impaired people will be developed.

In **Donostia - San Sebastián** 127 buses at 20% to 100% bio-diesel blends will be put in operation. Bio-diesel and hybrid vehicles will also operate in the municipal fleet. A hybrid bus and 30 buses with the EEV standard will be purchased. Measures will implement certified high quality bus corridors, equipped with security cameras and a business district public transport service. Further infrastructure for cycling and walking will be extended including the introduction of new lifts and a new escalator in order to encourage walking and cycling in hilly areas.

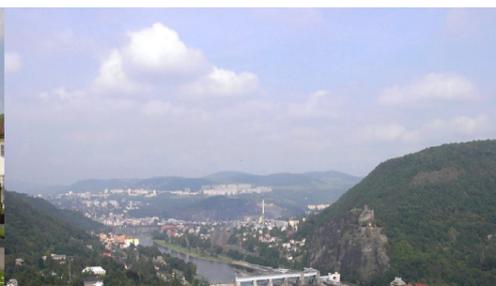
In **Iasi**, the use of bio-methane within the project corridor will be increased. Activities towards collective transport and intermodal integration will comprise improved ticketing offering contactless cards and special fares for students and pupils, improved PT Information at bus stops, showing routes and waiting times in real time and bus priority measures including a green light system and separate priority routes for public transport vehicles.

In **Monza**, the development of school travel plans and the study and design of an Urban Traffic Control System (UTC), involving several important intersections as well as Public Transport lines, will be important measures.

In **Ústí nad Labem**, a safety audit, traffic speed reduction actions and publicity campaign will form important road safety measures. Moreover, Ústí nad Labem will undertake a study that will identify measures to reduce road noise within the CIVITAS plus corridor.

## Measures introduced in ARCHIMEDES

	A	B&H	DSS	I	M	UL
Alternative fuels & clean vehicles	■	■	■	■	■	
Collective transport & intermodal integration	■	■	■	■	■	
Demand management	■	■	■	■		■
Influencing travel behaviour	■	■	■	■	■	■
Safety, security & health	■	■	■	■		■
Innovative mobility services	■	■	■	■	■	■
Energy-efficient freight logistics	■	■	■	■		■
Transport telematics	■	■	■	■	■	





**Aalborg Kommune**  
Aalborg



**Nordjyllands Trafikselskab**  
Aalborg



**Brighton & Hove City Council**  
Brighton & Hove



**Brighton & Hove Bus and Coach Company Ltd.**  
Brighton & Hove



**Donostia Udala**  
Ayuntamiento de San Sebastián

**Ayuntamiento de Donostia-San Sebastián**  
Donostia-San Sebastian



**Compañía del tranvía de San Sebastián**  
Donostia-San Sebastián



**Grupo de Estudios y Alternativas 21, S.L.**  
Donostia-San Sebastián



**Universidad del Pais Vasco**  
Donostia-San Sebastián



**Instituto Vasco de Logistica**  
Donostia-San Sebastián



**Primaria Municipiului Iasi**  
Iasi



**Regia Autonoma de Transport Public Iasi**  
Iasi



**Universitatea Tehnică din Iasi**  
Iasi



**Comune di Monza**  
Monza



**Project Automation**  
Monza



**Trasporti Pubblici Monzesi**  
Monza



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