



## Mobility Initiatives for Local Integration and Sustainability

**Newsletter number 9**  
February 2008

Dear Reader,

This year, the CIVITAS MOBILIS project is entering into its final year, its home stretch. At this point, we continue to encourage warmly our teams to do their best as usual and to focus more specifically on evaluation.

Indeed, after 3 years of hard work on implementing the MOBILIS measures, we now have to concentrate our energy on evaluation activities. During the forthcoming months, many essential reports on results and recommendations are going to be produced. Those documents are actually very important, mainly to facilitate the transfer of our experience to other European cities concerned by clean mobility.

Last November, the CIVITAS MOBILIS partners met in Toulouse where a special workshop was organised dealing with ticketing systems and public transport fares. It was a very successful meeting where the partners demonstrated the innovative solutions realised in their respective cities in terms of ticketing and shared lessons in this important technological field of urban transport mobility.

At the end of February 2008, the City of Venice will host a very important workshop dealing with car-sharing where partners and other European cities will exchange their experience. We have no doubt of the positive outcome of this meeting.

Hoping that you will attend this event, I am glad to wish you an pleasant read of this 9th CIVITAS MOBILIS newsletter.

Alexandre BLAQUIERE  
Project Coordinator



City of Venice (I)

### In this issue:

- Emission savings due to car sharing scheme in Venice
- Project implementation reports
- MOBILIS meets stakeholders
- Upcoming events
- Contacts





## Focus Article

# Report on the analysis of emissions savings due to the corporate and business/home car sharing and extended car sharing scheme in Venice

At the end of October 2007, the ASM car sharing fleet accounted for 46 vehicles, including 2 equipped to suit disabled users. 16 of the vehicles, 35% of the total, run on CNG (compressed natural gas) while the rest are petrol powered. At that time, MOBILIS had contributed to the purchase of 12 vehicles, including the 2 designed for disabled users. The total mileage of the fleet reached nearly 900,000 KM in the first 10 months of 2007 and it was nearly equally distributed between CNG and petrol cars: 401,000 vs 484,000 KM respectively.

Since this study was carried out, ASM has purchased another 8 bi-fuel vehicles with a contribution from MOBILIS funding and an additional 2 hybrid vehicles.

The users who subscribed to the car sharing scheme at that time totalled 4000. In addition, 9 firms, including the Venice City Council have a special agreement with ASM and a total of 494 local firms use the Car sharing scheme.

The fleet of CNG powered vehicles on the 31/10/2007 included 15 cars (Opel Zafira, Fiat Punto and Panda) and 1 light duty commercial vehicle (Fiat Doblo).

The report attempts to quantify the environmental benefits that can be ascribed by the ASM car sharing initiative in the Venice area. The emission reduction promoted by the use of CNG vehicles of the ASM car fleet has been estimated and the overall environmental impact of the car sharing initiative has also been evaluated.

A conservative approach is adopted in quantitatively estimating the environmental benefits of the ASM car sharing initiative. It is assumed that there is a reduction of pollutant emissions coming from the combined benefits of the use of the CNG vehicles in the fleet, the compliance to EURO IV emission standards of the rest of the fleet (i.e. with lower emissions compared to the majority of the circulation cars in the Venice area and to a change in mobility habits of the car sharing customers.

In principle carbon emissions from CNG powered cars are reduced due to the low carbon content and high octane

number of the fuel (Hendriksen et al., 2005). However, in addition to carbon dioxide, methane (the main constituent of natural gas) is also an important greenhouse gas. Therefore the life cycle emissions of methane must also be accounted for when estimating the impact of natural gas cars on global warming (Beer et al., 2004; Briceno et al., 2005; Lane, 2006). Taking carbon dioxide and methane emissions into account, natural gas bi-fuel cars (and car derived vans) show an improvement in greenhouse gas emissions of around 10-15% as compared to those using petrol. In addition there is also an economic benefit as CNG is cheaper than petrol and with the same quantity of fuel higher mileage can be obtained. Furthermore state or regional incentives are often offered.

With the exception of methane, pollutant emissions are remarkably reduced for natural gas cars. In particular, sulphur oxides and particulates are virtually eliminated. Furthermore, the unburned hydrocarbons (such as methane) contribute less to tropospheric ozone formation than the volatile organic compounds present in petrol exhaust emissions do. Larger emission reductions are provided by mono fuelled (dedicated gas) engines. The other pollutants such as CO and NO<sub>x</sub> are also reduced.

In the study, the emissions of the CNG vehicles of the ASM fleet were compared with the equivalent petrol fuelled cars based on data provided by the manufacturer or by literature sources (Volpi and Vafadis, 2007; Cavallino, 2006; Salzburg AG utilities, 2007; EEA, 2006; Ristovski et al., 2004; Librudi, 2007; Smokers et al., 2006). The emission factors were identified for each type of CNG car used in the car sharing service for both petrol powered and CNG powered cars. Table 1 illustrates the emission factors for the Fiat Punto and Panda.



Table 1: Fiat Punto and Fiat Panda emission factors for the petrol and CNG engines.

FIAT PUNTO AND PANDA	Petrol	CNG
Power (Kw)	44	38
Engine displacement	1242 cc	1242 cc
Fuel consumption	6.3 l/100 km	4.3 m <sup>3</sup> /100km
CO <sub>2</sub> emissions	150 g/km	119 g/km
CO emissions	0.45 g/km	0.32 g/km
HC emissions	0.027 g/km	0.008 g/km
NO <sub>x</sub> emissions	0.03 g/km	0.017 g/km

In general it was found that emission reductions for CNG powered vehicles are in the order of ca. 20-30% for CO<sub>2</sub> and CO while for HC and NO<sub>x</sub>, the reduction is far greater (from 40% to 90%).

Calculations were then made based on 2007 data on the total mileage of individual vehicles which was recorded until the 31/10/2007 and then projected in order to provide a yearly value. The parameters taken into account were CO, NO<sub>x</sub>, HC and CO<sub>2</sub>. Table 2 illustrates this for NO<sub>x</sub>. Other tables were produced respectively for the other 3 parameters studied.

Table 2: NO<sub>x</sub> emission reduction due to the use of CNG vehicles

ID	CAR	km	NO <sub>x</sub> petrol emission factor g/km	NO <sub>x</sub> CNG emission factor G/km	Difference %	Difference kg/y
1	Zafira	34175	0.034	0.003	-90%	-1.0
2	Zafira	2188	0.034	0.003	-90%	-0.1
3	Zafira	37273	0.034	0.003	-90%	-1.1
4	Zafira	37562	0.034	0.003	-90%	-1.1
5	Zafira	40373	0.034	0.003	-90%	-1.2
6	Zafira	48680	0.034	0.003	-90%	-1.5
7	Zafira	19098	0.034	0.003	-90%	-0.6
8	Punto	36762	0.03	0.017	-43%	-0.5
9	Punto	38104	0.03	0.017	-43%	-0.5
10	Punto	16936	0.03	0.017	-43%	-0.2
11	Punto	35958	0.03	0.017	-43%	-0.5
12	Punto	30710	0.03	0.017	-43%	-0.4
13	Punto	826	0.03	0.017	-43%	0.0
14	Punto	15799	0.03	0.017	-43%	-0.2
15	Punto	33506	0.03	0.017	-43%	-0.4
16	Punto	28234	0.03	0.017	-43%	-0.4
17	Panda	9818	0.03	0.017	-43%	-0.1
18	Doblo	14263	0.04	0.02	-43%	-0.3
					<b>TOTAL</b>	<b>-10.2</b>

In addition to the emission reductions calculated through this series of tables, the study takes into account the reduction in pollutant emissions that can be ascribed to the use of car sharing vehicles in substitution of private and or company cars that are not compliant to Euro IV standards. In addition to that, how the habits of the ASM car sharing service users have changes in terms of car use is considered. Previous experiences (e.g Bremen, Portland: Ryden et al, 2005; City of Bremen, 2004) demonstrate how car sharing users tend to postpone the purchase of a car (typically the second car of a household) or drive less by using more public transport or by walking. Such influence on the users' lifestyle translates into a reduction in the overall average mileage per person, and in a similar car sharing initiative was estimated to be around 50% (Shaheen et al., 2003). This figure can be noticeably increased when the car sharing scheme is adopted as a complete substitution of family or company cars.

If it is assumed that the participants in the car sharing service modify their mobility habits by reducing their car use by 50% in terms of km/year (Shaheen et al., 2003), we can easily estimate the resulting emission reduction. Table 3 shows the reduction in emissions resulting from the com-



combination of this contribution with the reduction produced by the lower emission factors of the CNG vehicles. Such reduction is the lowest possible estimate as we assumed that all the users were Euro IV car owners.

Table 3: Emission reduction considering both the benefits of CNG vehicles and reduced mileage due to changed mobility habits

	<b>Emission Reduction</b>
CO <sub>2</sub>	113 t/year
CO	259 kg/year
NO <sub>x</sub>	29 kg/year
HC	27 kg/year

However, such figures would be noticeably increased if we were to take into account the real picture of the circulating fleet in the Venice area, that probably accounted for only ca. 15-20% of Euro IV cars during the year 2007. It is therefore legitimate to at least double the figures provided in table 3 to provide a more realistic estimate of the overall emission reduction that can be ascribed to the ASM car sharing initiative.

The car sharing service operated by ASM is rapidly increasing in number of customers, both citizens and companies, thus reaching a wider share of the Venice council population. This is making the car sharing scheme increasingly appealing to the public as more cars and more collection and return points are made available.

In addition, a growing proportion of the car fleet is made by CNG powered vehicles, thus reducing the environmental impact of their emissions. The other cars in the fleet run on petrol but they all comply to EURO IV standards and therefore their environmental impact is still lower than most cars circulating in the area.

Such benefits in terms of emission reduction can be quantified in at least 120 t/y of CO<sub>2</sub> (not a pollutant but a major greenhouse gas), 259 kg/y of CO, 29 kg/y of NO<sub>x</sub> and 27 kg/y of HC.

Other wider benefits are represented by the lower number of cars circulating, that has the effect of reducing traffic congestion and increasing the number of parking places. Most of all, the availability of the car sharing service provides a more environmentally friendly way of transport if compared to the use of private cars but still allowing a good degree of flexibility and independence for its users. It may also favour a change in mobility habits of the population.

For more information please contact:  
[asm@asmvenezia.it](mailto:asm@asmvenezia.it)



## Project implementation reports

### The setting up of a Mobility Agency in Toulouse

The creation and the opening of the Mobility Agency in Toulouse which is scheduled in June 2008 aims to increase the use of alternative transport modes in the greater Toulouse area. Developed in the framework of the MOBILIS project, this Agency will be a service set up and offered by Tisseo-SMTC (the public transport authority) and will aim to improve and to change significantly mobility behaviours. The Mobility Agency will permit to improve the offer of alternative mobility and will permit its customers to access sustainable mobility easily, to develop their use of alternative transport modes. The focus will be put on general and specific audiences (disabled persons, tourists, students...) and on traffic generators (companies, public administrations, public facilities...). A team of 'Company Mobility Advisors', a website, a call-centre, a car-pooling service and a central welcome site with local offices will be proposed and progressively implemented by the Mobility Agency in order to meet the expectations of the greater Toulouse inhabitants.

For more information, please contact Alexandre Blaquiére, [alexandre.blaquiere@smtcat.fr](mailto:alexandre.blaquiere@smtcat.fr)

### CNG buses in Venice



CIVITAS MOBILIS has permitted ACTV to broaden its natural gas powered fleet.

In Venice all of the 35 CNG buses are currently in circulation. An alternative CNG filling station is being used at night until the pipeline connecting the newly constructed ACTV dedicated filling station is completed in late spring 2008.

Having come through a complex authorisation procedure and concerns regarding material supply, work is now visibly in progress for the pipeline which will connect the new ACTV dedicated filling station to the gas supply network. In addition, the 5 natural gas minibuses are now circulating, and are used for park and ride services.

For more information, please contact [elio.zaggia@actv.it](mailto:elio.zaggia@actv.it)

### The Carrefour group inaugurates its first CNG filling station in Toulouse



As one of the world's leading distribution groups, Carrefour recently decided to make a big step forward towards a more sustainable approach for its filling stations policy. On the 9<sup>th</sup> of November 2007, both the CEOs of Gaz



de France (main national gas supplier) and of Carrefour inaugurated the first French CNG filling station in the Carrefour hypermarket of Toulouse Purpan. Considered as a new step for the development of CNG offer for the general public, the opening of this CNG filling station is therefore a complement to the development of the CNG micro-compressor filling system which has now been commercialized by Gaz de France for more than two years. Launched in the framework of the CIVITAS MOBILIS project, the CNG micro-compressor offers the opportunity to every CNG car owner to fill its vehicle directly at home. Far beyond the ambition to open some new CNG filling stations all over the national territory (the Total group will also soon develop its own CNG filling station), the synergies which have been created by the different actors of the CNG chain (gas suppliers, automobile manufacturers and local authorities) are now permitting them to provide the general public with a real development of alternative fuel for their cars.

For more information, please contact Jonathan Turgy, [jonathan.turgy@smtcat.fr](mailto:jonathan.turgy@smtcat.fr)

## **Toulouse: inauguration of the new bus depot of Langlade and launch of biodiesel experimentation**

6 years after the destruction of the bus depot of Langlade which was caused by the explosion of the AZF factory, Tisséo-SMTC has inaugurated its entirely new rebuilt depot. The new site is composed of three main buildings (maintenance, cleaning and filling station, offices) and has been constructed over an area of 12 ha of which 2,5 ha are a green area. Considered as one of the most ecological constructions of Toulouse, this depot contains a new CNG filling station which will enable Tisséo-SMTC (the public transport authority) to extend its CNG fleet in the coming years (30 new CNG buses are currently being purchased). In addition, one of the tanks of the building is dedicated to biodiesel experimentation which will take place throughout the year 2008. The public transport operator is currently launching a tender for the supply of B-30 biodiesel. It is expected to run about 130 buses with biodiesel. More than ever, it can be highlighted that Tisséo-SMTC is about to reach its objective within MOBILIS to have a 100% clean bus fleet in 2009.

For more information, please contact Jonathan Turgy, [jonathan.turgy@smtcat.fr](mailto:jonathan.turgy@smtcat.fr)





## Going by bus? Use the SMS ticket! In Odense

For the first time in Denmark it is now possible to pay for your trip by bus with a SMS ticket. On the 29th January 2008 the public transport company in Odense "FynBus" launched the SMS ticket. The SMS ticket is a result of co-operation between the phone company TDC and FynBus. The project is co-financed by Mobilis-CIVITAS.

### It's that easy

It is very simple to buy a SMS ticket. All you need is a mobile phone. Before going by bus you simply send a SMS to buy a ticket in the form of a SMS. When boarding the bus you just show the driver the SMS. Then you can start your journey – easy and without cash in your pocket. The SMS ticket is also a bit cheaper compared to a trip paid with cash.

## Attractive Public transport

The SMS ticket is a pilot experiment. During the next year passengers in city buses in Odense as well as regional buses on Funen can buy tickets with their mobile phones.

FynBus has previously been involved in developing new technology. In September 2007 FynBus launched the on-line buses with free internet and digital traffic information. The SMS ticket is yet another initiative in the effort to make it easier and more attractive to go by bus. The initiative is also beneficial in the long term in connection to reducing the amount of cash in the buses.

## Experiences from abroad

Several countries abroad already have experiences when it comes to paying with the mobile phone. In Japan you can buy burgers, in Austria you can pay for a taxi and in Stockholm, Sweden you can go by bus.

Hopefully this project in Odense will give great experience to developing the use of the mobile phone as a way of paying. But it will also give a brand new image to public transport – it is attractive, easy and simple to go by bus.

For more information, please contact Kristina Mai Edrén, [kme@odense.dk](mailto:kme@odense.dk)

## Satellite control for water public transport services in Venice



This measure aims to assist transport services and optimise water traffic in the lagoon through the integration of the Municipal police control centre and the ACTV operations centre.

The need to set up the joint centre arose because the Municipal Police centre, which was under construction, and the already functioning ACTV centre were dedicated to specific traffic subsystems and could not be used for overall management of the water transport system. A joint centre makes it possible to obtain information about the general water traffic situation and provides complete data for simulations and consequent traffic control regulations.

To date the joint centre has been successfully set up and tested, as demonstrated to the Commission and GUARD in 2007. Training courses will shortly be held for personnel working on the system and a technical manual for maintenance is currently being developed.

For more information, please contact Manuele Medoro, [manuele.medoro@comune.venezia.it](mailto:manuele.medoro@comune.venezia.it)



## Another safe way to cycle in Debrecen

The implementation of over 50 bicycle racks was only the first step for Debrecen to achieve a real working bicycle network. The next event will be the development of the road network which has already been started. In the northern part of the city, a one kilometer long bicycle lane has been created with the appropriate road signs and marks. This enables many inhabitants of the northern suburbs to access the city – and more closely, a campus of the University – more securely. Until May, one of the most densely populated parts of the city – called Tóció – will be subject to the same development. The plots for other alternative development solutions have been defined as well, and implementation will start in forthcoming months.

For more information, please contact László Krajczár, [krajczar@ph.debrecen.hu](mailto:krajczar@ph.debrecen.hu)

## Piggybacks on the road in Debrecen

At last, students of the University of Debrecen can take advantage of the car-sharing system as well. By the end of 2007, the website facilitating this sustainable way of transport had been launched under the URL <http://www.utitars.debrecen.hu>. To raise public awareness about this possibility, serious dissemination activities have been made. Every student of the University got an e-mail message, containing the short description of the service and the address as well. Local representatives of the Civitas initiative appeared on TV and local representatives gave interviews to newspapers.

The results have exceeded all expectations. In a month, over 100 registrations – and counting – have been made. If this service proves to be successful, university students will be able to do a lot for sustainable traffic.

For more information, please contact László Krajczár, [krajczar@ph.debrecen.hu](mailto:krajczar@ph.debrecen.hu)

## Priority for the tram in Debrecen

After the installation of the real-time passenger information system, the tram traffic of Debrecen faced further developments, concerning tram priority.

The newly installed tram priority system is fully functional in one of Debrecen's major traffic junctions called Bem tér (Bem square). For the approach of a tram, the traffic lights give free way, while blocking the traffic crossing its way. Passengers will probably not notice the technical details, but what is more important for them, they will notice the shorter time required for their journey. Hopefully, with positive changes like this, more and more inhabitants are going to change to mass transportation and other sustainable transport modes.

For more information, please contact Péter Frick, [fmea@dkv.hu](mailto:fmea@dkv.hu)





## MOBILIS study tour to the biodiesel production plant



Thirty experts from various institutions and organizations joined the CIVITAS MOBILIS team at the study tour to the local biodiesel production at Pinus TKI d.d., also partner in the project. Mr. Zlatko Partljic presented the history, development and the plans regarding biodiesel production in the future. Pinus TKI is in a final phase to start construction of the new biodiesel production line with a capacity of 50.000 tons per year. After the thorough site visit of the facility, participants returned to the education premises of the company.

Dr. Viktor Jecic from National Agricultural Institute presented the options and prospects of domestic production. Dr. Breda Kegl from the Maribor Mechanical Engineering Faculty presented the results of biodiesel use in the bus engine, done with the support of the European Commission. She pointed out that the engine optimisation measures can lower the emission values efficiently and effectively.

For more information, please contact Albin Keuc, [albin.keuc@guest.arnes.si](mailto:albin.keuc@guest.arnes.si)

## Waiting for the permit to use biodiesel in Debrecen

Hajdú Volán, the mass transportation company of Debrecen faces major challenges concerning the change to environmentally friendly mass transportation. After the successful conversion of the buses, it encountered the problem of assessing proper fuel.

Due to strict governmental regulations, it is still not possible to use bio fuel in Hungary without a permit. Hajdu Volán applied for a permit to the Ministry of Finance in November. Meanwhile, the biodiesel source has been selected. The supplier is a company located in Kunhegyes that serves users countrywide. Hopefully, the permit will be granted soon and the new buses can enter the mass transportation of Debrecen in the coming months.

For more information, please contact András Teleki, [telekia@hajduvolan.hu](mailto:telekia@hajduvolan.hu)



## MOBILIS meets stakeholders

### International Conference: Alternative fuels 2008

The international conference "Alternative fuels 2008" was held on January 10-11, 2008 at the hotel Piramida in Maribor under the patronage of the Engine Research Laboratory of the Faculty of Mechanical Engineering. The conference was attended by more than 60 researchers and experts from industry and research institutions from England, Spain, Italy, Bosnia and Herzegovina, Serbia, and Slovenia.

The goal of the conference was to bring together people from a variety of disciplines in order to promote modern technology, necessary to support the environment-friendly and sustainable development of our society. The main focus was to enhance research collaboration and knowledge transfer between research institutions and industry.

The topics of the conference were split into four parts:

- fuel production and analysis,
- fuel handling and storage,
- emissions control and alternative drive vehicles, hybrid vehicles, fuel cells, and
- fuel usage in internal combustion engines.

All papers, presented at the conference, were reviewed by a scientific committee and published in the conference proceedings available at <http://fs-server.uni-mb.si/si/conf/MobilisIC/>. According to the response of the participants, the conference was a success.

For more information, please contact dr. Breda Kegl, [breda.kegl@uni-mb.si](mailto:breda.kegl@uni-mb.si)



### Mobilizing stakeholders for sustainable transport solutions



In February 2008 CIVITAS Mobilis in Ljubljana organized the annual conference on city mobility issues. 50 representatives from all the main stakeholders were invited by Ljubljana Mayor Zoran Jankovic, to explore issues and solutions Ljubljana can provide as an input to the European Commission Green paper Towards new culture in city mobility. Ljubljana's participation in the CIVITAS Initiative has not only provided the city administration with possibilities to compare and evaluate its policies, it also opened several development dilemmas in the field of city transport.

However the discussion has pointed out that cities have to follow solutions that:

- are building on existing transport infrastructure, without additional widening of the roads;
- are putting some limitations on personal car traffic and
- are giving an advantage to public city transport (by yellow lanes) and higher occupancy rate in cars (so called green lanes)

A strong need for awareness raising, education and information campaigns was also stressed. Such campaigns should follow the basic requirements of the sustainable transport concept: limiting car use in the city and providing good alternatives for residents.

Part of the conference was dedicated to the capabilities offered by the CIVITAS Initiative. Presented by Fred Dotter (CIVITAS GUARD), the National Task Force is a tool to actively enable knowledge transfer among cities and to involve the key stakeholders by using existing channels.

For more information, please contact Albin Keuc, [albin.keuc@guest.arnes.si](mailto:albin.keuc@guest.arnes.si)



## Upcoming events

### **Reinventing the bicycle in the modern society workshop in Odense**

On the 22<sup>nd</sup> of May 2008 Odense will host a cycle workshop with the title "Reinventing of the bicycle in the modern society". The programme is not yet complete but some keywords are health, technology and interactive solutions, campaigns and urban planning.

The workshop is part of Odense's commitment as a thematic leader in the field of cycling.

For more information, please contact Kristina Mai Edrén, [kme@odense.dk](mailto:kme@odense.dk)

### **CIVITAS MOBILIS Workshop in Venice "Car Sharing Across Europe"**

Increased awareness of climate change and rising fuel prices have contributed to the recent widespread success of car sharing and car pooling across Europe. Car sharing and car pooling bring social, environmental and economic benefits by helping reduce dependence on the private car, reduced conflict over parking, reduced air and water pollution as well as a parallel increase in the use of public transport and other alternative models of travel.

This Workshop, organised by the City of Venice within the CIVITAS MOBILIS project, offers cities and transport operators the opportunity to meet and discuss the start of the art of car sharing and car pooling across Europe, through presentations of CIVITAS cities local experience and of other European best practices.

The Workshop will take place in the City of Venice on the 28<sup>th</sup> of February 2008. The MOBILIS consortium will avail of this workshop to hold one of their regular meetings to discuss progress of measures, evaluation and dissemination on the 27<sup>th</sup> and 29<sup>th</sup> of February.

The Workshop is open to the CIVITAS community and will be organized at Venice - Istituto Veneto di Scienze, Lettere ed Arti, Palazzo Cavalli Franchetti on February 28, 2008 (9.00 - 17.00)

Additional information: Isabella Marangoni, [Isabella.marangoni@comune.venezia.it](mailto:Isabella.marangoni@comune.venezia.it) or Chiara Tenderini, [chiara.tenderini@comune.venezia.it](mailto:chiara.tenderini@comune.venezia.it), +39 041 2747829





## CIVITAS MOBILIS cities and partners

In 2004 the cities of Toulouse (France), Debrecen (Hungary), Ljubljana (Slovenia), Odense (Denmark), and Venice (Italy), and their main local mobility stakeholders established a European partnership for "Implementing Mobility Initiatives for Local Sustainability" – of which the CIVITAS MOBILIS project is the physical result.

MOBILIS aims to implement radical strategies for clean urban transport in all five cities and to create a new culture for clean urban mobility in the wider framework

### The Main Partners:



#### Agglomeration of TOULOUSE (F)

<http://www.tisseo.fr/>

- Syndicat Mixte des Transports en Commu de l'agglomération toulousaine, Tisséo-SMTC
- Communauté d'Agglomération du Grand Toulouse
- Communauté d'Agglomération de Toulouse Sud-Est
- City of Toulouse
- City of Blagnac
- Connex Toulouse
- Gaz de France
- Centre d'Etudes Techniques de l'Équipement du Sud-Ouest
- Agence d'Urbanisme et d'Aménagement du Territoire Toulouse Aire Urbaine



#### DEBRECEN (H)

<http://www.debrecen.hu/>

- Municipality of Debrecen
- DKV Debrecen Transport Company
- Hajdú Volán Transportation Inc.
- Hajdú-Bihar County State Road Maintenance Company
- University of Debrecen



#### VENICE (I)

<http://www.comune.venezia.it/>

- City of Venice
- ACTV S.p.A.
- Azienda Servizi Mobilità S.P.A.
- VESTA S.p.A. Venezia Servizi Territoriali Ambientali
- Agire – Agenzia Veneziana per l'Energia
- Commissario Delegato dal Governo per il Traffico Acqueo nella Laguna di Venezia
- Forma Urbis S.a.S.

of sustainable development. The project will enable the involvement of all relevant stakeholders and the transfer of good practices to other urban communities across Europe.

Altogether 30 partners work on a range of mobility improvements scattered within eight technical and five policy themes during the four years lifetime of the project.



#### ODENSE (DK)

<http://www.odense.dk/>

- City of Odense



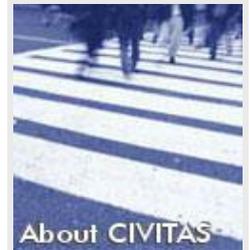
#### LJUBLJANA (SLO)

<http://www.ljubljana.si/>

- City of Ljubljana
- Ljubljana Public Transport Ltd.
- Pinus, Rače
- University of Maribor, Faculty of Mechanical Engineering, Institute of Energy, Process and Environmental Engineering
- Agricultural Institute of Slovenia
- Regional Environmental Center for Central and Eastern Europe

#### SUPPORTING PARTNERS

- Mobil21 (B)
- Rupprecht Consult – Forschung & Beratung GmbH, (D)



**CIVITAS** - cleaner and better transport in cities - stands for City-ViTAility-Sustainability.

With the CIVITAS Initiative, the EC aims to generate a decisive breakthrough by supporting and evaluating the implementation of ambitious integrated sustainable urban transport strategies that should make a real difference for the welfare of the European citizen.

CIVITAS I started in early 2002 (within the 5th Framework Research Programme); CIVITAS II started in early 2005 (within the 6th Framework Research Programme).

Within CIVITAS I (2002-2006) there are 19 cities clustered in 4 demonstration projects, whilst within CIVITAS II (2005-2009) 17 cities in 4 demonstration projects are taking part. These 36 cities all over Europe will be funded by the EU with 100 M and the overall budget of the Initiative will be more than 300 M.

#### Objectives:

- to promote and implement sustainable, clean and (energy) efficient urban transport measures
- to implement integrated packages of technology and policy measures in the field of energy and transport in 8 categories of measures
- to build up critical mass and markets for innovation

#### Two horizontal projects support the CIVITAS demonstration projects & cities by:

- Cross-site evaluation and Europe wide dissemination in co-operation with the demonstration projects
- The organisation of the annual meeting of CIVITAS Forum members
- Providing the Secretariat for the Policy Advisory Committee (PAC)
- Development of policy recommendations for a long-term multiplier effect of CIVITAS

#### Key elements of CIVITAS

- CIVITAS is co-ordinated by cities: it is a programme "of cities for cities"
- Cities are in the heart of local public private partnerships
- Political commitment is a basic requirement
- Cities are living "Laboratories" for learning and evaluating

The CIVITAS MOBILIS Newsletter is produced by the MOBILIS project partners, co-funded by European Commission through CIVITAS INITIATIVE (<http://www.civitas-initiative.org/>). The MOBILIS E-Newsletter is published quarterly (during the project time span). If you want to register for a free subscription, please send an e-mail to [milena.marega@guest.arnes.si](mailto:milena.marega@guest.arnes.si). The CIVITAS MOBILIS E-Newsletter is available at <http://www.civitas-mobilis.org/>.

Cover photos were taken from FGM AMOR Austrian Mobility Research CD "Emotions for Clean Urban Transport", 2004. Gerhard Steinwender (Austria). More at <http://www.emotional-campaigns.net>. Cover graphic by City of Venice.

**Editors:** Milena Marega, +386 1 425 70 65, [milena.marega@guest.arnes.si](mailto:milena.marega@guest.arnes.si) and Jane Wallace-Jones, +39 041 270 08 26, [jane.wallacejones@comune.venezia.it](mailto:jane.wallacejones@comune.venezia.it), in cooperation with Site Dissemination Managers from CIVITAS MOBILIS cities.

**Production:** Regional Environmental Center for Central and Eastern Europe, Country Office Slovenia, City of Ljubljana.



THE CIVITAS INITIATIVE  
IS CO-FINANCED BY  
THE EUROPEAN UNION