





## Donostia - San Sebastian

T4.3 Campaingns to promote biodiesel in Donostia Sebastian

Donostia – San Sebastian

July 2010



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## 1. Introduction

## 1.1 Background CIVITAS

CIVITAS - cleaner and better transport in cities - stands for Clty-VITAlity-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) and **CIVITAS PLUS** started in late 2008 (within the 7th Framework Research Programme).

The objective of CIVITAS-Plus is to test and increase the understanding of the frameworks, processes and packaging required to successfully introduce bold, integrated and innovative strategies for clean and sustainable urban transport that address concerns related to energy-efficiency, transport policy and road safety, alternative fuels and the environment.

Within CIVITAS I (2002-2006) there were 19 cities clustered in 4 demonstration projects. within CIVITAS II (2005-2009) 17 cities in 4 demonstration projects, whilst within CIVITAS PLUS (2008-2012) 25 cities in 5 demonstration projects are taking part. These demonstration cities all over Europe are funded by the European Commission.

#### **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

### 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 Political 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



### 1.2 Background ARCHIMEDES

ARCHIMEDES is an integrating project, bringing together 6 European cities to address problems and opportunities for creating environmentally sustainable, safe and energy efficient transport systems in medium sized urban areas.

The objective of ARCHIMEDES is to introduce innovative, integrated and ambitious strategies for clean, energy-efficient, sustainable urban transport to achieve significant impacts in the policy fields of energy, transport, and environmental sustainability. An ambitious blend of policy tools and measures will increase energy-efficiency in transport, provide safer and more convenient travel for all, using a higher share of clean engine technology and fuels, resulting in an enhanced urban environment (including reduced noise and air pollution). Visible and measurable impacts will result from significantly sized measures in specific innovation areas. Demonstrations of innovative transport technologies, policy measures and partnership working, combined with targeted research, will verify the best frameworks, processes and packaging required to successfully transfer the strategies to other cities.

## 1.3 Participant Cities

The ARCHIMEDES project focuses on activities in specific innovation areas of each city. known as the ARCHIMEDES corridor or zone (depending on shape and geography). These innovation areas extend to the peri-urban fringe and the administrative boundaries of regional authorities and neighbouring administrations.

The two Learning cities, to which experience and best-practice will be transferred, are Monza (Italy) and Ustí nad Labem (Czech Republic). The strategy for the project is to ensure that the tools and measures developed have the widest application throughout Europe, tested via the Learning Cities' activities and interaction with the Lead City partners.

#### 1.3.1 Leading City Innovation Areas

The four Leading cities in the ARCHIMEDES project are:

- Aalborg (Denmark);
- Brighton & Hove (UK);
- Donostia-San Sebastián (Spain); and
- lasi (Romania).

Together the Lead Cities in ARCHIMEDES cover different geographic parts of Europe. They have the full support of the relevant political representatives for the project, and are well able to implement the innovative range of demonstration activities.

The Lead Cities are joined in their local projects by a small number of key partners that show a high level of commitment to the project objectives of energy-efficient urban transportation. In all cases the public transport company features as a partner in the proposed project.

## Donostia - San Sebastian

The city of Donostia -San Sebastián overlooks the sea and, with a bit more than 180,000 inhabitants, keeps a human scale. Some people consider the balanced combination of small mountains, manor buildings, and sea as the setting for one of the most beautiful



cities in the world. We have a tradition in favouring pedestrians, cyclists and public transport.

For about twenty years, the city has been enforcing a strong integrated policy in favour of pedestrians, bicycles and public transport. Considering walking and cycling as modes of transport has led to the building of a non-motorised transport network for promoting this type of mobility around the city.

Likewise, the city has extended its network of bus lanes. The city holds one of the higher bus -riding rates, with around 150 trips per person per year.

## 2.1 Objectives in CIVITAS

The CIVITAS project is a perfect opportunity to expand our Sustainable Urban Transport Strategy. With the package of CIVITAS measures Donostia-San Sebastián wants to:

- Increase the number of public transport users
- Decrease the number of cars entering in the city centre
- Increase the use of the bicycle as a normal mode of transport
- · Maintain the high modal share of walking
- Reduce the number of fatal accidents and accidents with heavy injuries
- Reduce the use of fossil fuels in public transport.

## 3. Background to the Deliverable

This deliverable refers to Measure number 4 Biofuels and Clean Vehicles Donostia – San Sebastian. The Dbus company and the Municipality of Donostia San Sebastián are strongly committed to the use of biodiesel in the vehicles of municipal fleet and the Dbus fleet.

As a consequence of Task 1.6 of the ARCHIMEDES project, ADS developed a promotional campaign to raise the profile of two different, but dependent activities:

- Firstly, to encourage people of Donostia San Sebastián to start using biodiesel as part of the modification of their behaviour pattern in relation to use of mineral fuels.
- Secondly, to increase the quantity of oil that is recycled. Currently, oil recycling is
  expanding in all districts of the city, but the quantity of oil that is recycled is much
  less than expected. It is important to increase this activity as biofuel
  manufacturer's use used oil as their raw material to produce biofuels. Specific
  incentives such as prizes or merchandising were included in the campaign to try
  and encourage take up.

In order to achieve these two objectives, biodiesel among municipal fleet had to be promoted. At the time, use of biodiesel among these municipal vehicles was not that widespread. However, operators had the opportunity to use biodiesel as the local petrol supplier had one pump in one of their petrol stations. In addition,

seven hybrid cars had to be bought by the local police as part of the ARCHIMEDES demonstration project which meant that biodiesel had to be purchased for this purpose.



# 4. Campaign to promote biodiesel

### 4.1 Descriptions of the Work Done

The campaign has been developed in two different parts.

#### Part 1

Firstly a press conference was organised with the local press. Agents of the biofuel production company, the used oil collection company, the major of the city, the mobility councillor, the mobility director and a renowned Two Michelin Star chef attended this conference in order to present and explain their different perspectives in the field of biodiesel.

The representative of Ecogras<sup>1</sup> explained the process of collecting used oil and how it is organised in Donostia San Sebastián. Information on current quantities collected was given with indications on levels that could be expected in the future.

The representative of Bionor, a company which produces biofuel from used cooking oil, explained how the manufacturing process produced biodiesel using recycled oil and what quantities are being produced at the moment.

Andoni Luis Aduriz, chef of the Mugaritz restaurant, one of the best ten restaurants in the world, explained why it was so important to recycle used oil and the consequences of not doing so, the most important of which is water pollution: if there is no way of recycling used cooking oil, once has been used, people have the use of flush it down the sink. That means that this oil, depending on where each person did it, could pollute rivers or the sea. It is said that one litre of cooking oil can pollute 100 litres of water.

An important aspect of the press conference was to inform people that all the biofuel used by the Dbus company buses comes from recycled oil. The director of mobility of the Municipality of Donostia San Sebastián also informed the conference that these actions were taking place inside the CIVITAS ARCHIMEDES project, which has the major goal of promoting sustainable mobility in the city.

We can see the Director of Ecogras, the chef Andoni Luis Aduriz, Odon Elorza (Mayor of Donostia San Sebastián), Maravi Dafauce (Mobility Councillor) and Gerardo Lertxundi (Mobility Director) in the presentation to the press of this campaign.

<sup>&</sup>lt;sup>1</sup> Ecogras is the company in charge of collecting the used cooking oil in order to take it to the factory of Bionor. They have some small lorries which have a schedule to collect the oil for each district.





Fig. 1: Presentation to the press

#### Part 2

Secondly, a public presence in front of the Town Hall was organised. One EEV bus of the Dbus company and one point to collect used oil were placed at that location. This is probably the most visited place in the city, just in front of the beach and in the heart of the city. The aim was to encourage people to take the oil this place as well as make this kind of recycling more popular among people who do not practice it.

Merchandising was distributed and also a prize draw of two meals for two couples were offered by the Mugaritz restaurant as an incentive for those that took used oil to be collected. One leaflet was designed as well as two exhibition panels were prepared for the activity.



Fig. 2 The bus and the oil collection point in front of the Town Hall



The weather on that day was quite miserable and 100 of litres were collected. With a normal day we think that more than 250 litres could have been collected. But the main objective of this act was not the collection of oil but the visibility of oil recycling.

The leaflet prepared ad hoc for this event was distributed to the people who took part in this activity.

Also the promotion of biodiesel among the municipal has been completed. A letter was distributed to different departments in charge of the municipal vehicles fleet in order to encourage them to use biofuels. The company who won the tender of fuel supplying offers the possibility of biofuel providing. This company has two different petrol stations in the city (ES Anoeta and ES Larramendi) and in one of them there is a pump for biodiesel. So, for us is not difficult to take advantage of this possibility. The seven cars by the local police have been introduced in its fleet as part of the project. The local police has bought seven Toyota Prius, which are hybrid technology cars.

#### 4.2 Problems Identified

No major problems have been identified during the development of this action. In fact, collaboration of the affected companies was really important, and, what we anticipated would be the most difficult aspect achieve (to attract a a famous cook) was in fact very easy. From the very beginning Andoni Luis Aduriz was ready to collaborate with us and he has been really keen on the idea of recycling oil.

However, it was more difficult to coordinate the agenda of all interested parties involved. Companies, Major, Councillor and Chef each had different obligations and it was not always easy to get all of them at the same time for the press conference.

Apart from this, everybody was quite interested in promote oil recycling and use of biofuels.

Talking about the municipal fleet, we did not find any problem with them. They were really keen on this idea and they promoted it in a very positive way.

## 4.3 Risks and Mitigating Activities

As the Town Hall is probably one the most emblematic locations of the city, it was chosen as the best place to locate the bus and the recycling point. However, the problem with open air location is they are, of course, subject to wind and rain which was, unfortunately the case on the day of the conference. If the weather had been better, probably the amount of oil collected would have been higher.

In order to make this activity more visible and accessible to more people the local press was invited. The presence of the bus and recycling point was reported on in all local media and the coverage was wide as a consequence.

Regarding the promotion of biofuels in the local fleet, apart from talking to them and writing an official letter to influence and instil this as regular behaviour there has been little difficulty. (See Fig. 5). The fact that the company which won the tender of supply of fuels offered the service of biofuels made things a lot easier. This company offers the possibility of biofuel providing in one of their petrol stations (ES Anoeta). When some years ago the fuels tender was won by this company, one of the options they offered was this possibility, and they got more points in the tender for this reason.



#### 4.4 Dissemination Activities

Different pieces of news have been published in the local media.

http://www.diariovasco.com/v/20100514/san-sebastian/aceite-usado-mueve-autobus-20100514.html

http://www.diariovasco.com/v/20100514/san-sebastian/habra-contenedores-especialespara-20100514.html

http://www.diariovasco.com/20100513/local/biodiesel-autobuses-donostia-reducira-201005131726.html

http://www.diariovasco.com/20100513/local/donostia-promueve-reciclaje-aceite-201005132004.html

http://www.irutxulokohitza.info/albisteak/68375/olioa birziklatzeko kanpaina jarriko du abian donostiabusek.htm

http://www.noticiasdegipuzkoa.com/2010/05/14/vecinos/los-autobuses-de-donostia-

utilizan-un-30-de-biodiesel-procedente-de-aceite-reciclado

http://www.20minutos.es/noticia/706312/0/

http://www.que.es/guipuzcoa/201005131854-sebastian-promueve-reciclaje-aceiteusado.html

http://www.europapress.es/euskadi/quipuzcoa-00389/noticia-san-sebastian-promuevereciclaje-aceite-usado-cocinas-reutilizarlo-combustible-alternativo-20100513185444.html http://www.diariosansebastian.com/ n1348140 San Sebastian promueve el reciclai e del aceite usado en las cocinas para reutilizarlo como combustible alternativo.ht ml

http://www.donostia.org/home.nsf/0/8BD36B7F986F2AB8C12577230033F413?OpenDo cument&idioma=cas

http://www.diariovasco.com/v/20100516/san-sebastian/freir-anchoas-para-llenar-20100516.html

http://www.diariosansebastian.com/ n1348601 La utilizacion de biodiesel en el tr ansporte publico de San Sebastian supondra una reduccion de las emisiones de CO2 de 8 5 toneladas en cuatro anos.html

http://www.nexotur.com/nexobus/dbus/emprende/campana/promocion/biodiesel/reciclad o/aceite/san/sebastian/30284/

http://www.dbus.es/es/usuarios/noticia/184-el-biodiesel-que-utilizan-los-autobuses-dedbus-procede-del-aceite-reciclado





Fig. 3 Exhibition Panels





### ¿Sabes qué es el Biodiesel y para qué se utiliza?

#### Zer da Biodiesela eta zertarako erabiltzen da?

El Biodiésel es una mezcla de ésteres metílicos de ácidos grasos, considerado un carburante ecológico, totalmente compatible con el gasóleo comercial.

Biodiesela azido koipetsuz eginiko estere metilikoen nahasketa da, erregai ekologiko bat bezala kontsideratuta dago, eta gasolio komertzialarekin bateragarria da.









d-bus

#### ¿SABÍAS QUE...? BA AL ZENEKIEN...?

- 🖪 El aceite que tiras por el fregadero puede hacer funcionar Harraskatik botatzen duzun olioak, zure autobusa
- martxan jartzeko balio dezake.
- Ese aceite lo puedes llevar a los puntos de recogida que haya en tu ciudad.
  Olio hori, zure hirian dauden jasotze puntuetara eraman
- Después de limpiar y filtrar el aceite, se lleva a una fábrica de Biodiesel. Olioa garbitu eta iragazi ondoren, Biodieseleko fabrika batera eramaten da.
- El aceite es transformado en Biodiesel. Olioa Biodieselean bihurtzen da.
- El Biodiesel llega a Dbus en cisternas
- 6 El autobús de tu ciudad funciona con Biodiesel.

### ¿QUÉ ES EL BIODIESEL Y PARA QUÉ SE UTILIZA?

- Es fácilmente biodegradable, y en caso de derrame y/o accidente, no pone en peligro ni el suelo ni las aguas subterráneas
- No contiene ni benceno, ni otras sustancias aromáticas cancerígenas.
- No es una mercancía peligrosa
- Produce durante su combustión menos cantidad de CO<sup>2</sup>, que las plantas son capaces de absorber para su crecimiento
- Con el uso de aceites reciclados, "valorizamos un residuo", evitamos su vertido, salvaguardando la contaminación de las aguas subterráneas, fluviales y marinas.
- Posee un alto poder lubricante y, protege el motor, reduciendo la fricción, el desgaste, ruidos, así como sus gastos de mantenimiento
- · No contiene prácticamente nada de azufre. Evita las emisiones de
- · Es el único combustible no contaminante alternativo a los motores
- Genera riqueza socio económica en su zona de producción, tanto en el ámbito rural como en el industrial
- · Mejora la combustión, reduciendo claramente las emisiones de hollín
- Reduce la dependencia energética exterior

#### ZER DA BIODIESELA ETA ZERTARAKO ERABILTZEN DA?

- · Biodegradagarria da, eta isuri edo istripuren bat ematen bada ez ditu arriskuan jartzen lurzorua eta lur azpiko urak
- Ez du bentzenorik, eta ezta minbizia eragin dezakeen sustantzi
- Ez da merkantzia arriskutsua
- Erretzerakoan CO2 kantitate gutxiago botatzen du, landareek euren hazkuntzarako behar duten adina baino ez
- Berrerabilitako olioen erabilerarekin "hondakin bat balioztatzen dugu", bere isurketa saihesten dugu, lur azpiko ura, ibaietako eta itsasoko kutsadura babestuz.
- · Lubrikagarri bikaina da, motorra babesten du, marruskadurak, higadurak, zaratak eta mantentze gastuak murriztuz
- la ez du bat ere sufrerik. SOx-ko (euri azidoa) emisioak
- Diesel motorretan erabiltzeko alternatiba garbi bakarra da
- Ekoizpen eremuan aberastasun sozio-ekonomikoa sortzen du, bai nekazal eremuetan eta baita industrialdeetan ere
- Konbustioa hobetzen du, kedar isurketak nabarmen gutxituz Kanpo-energiarenganako mendekotasuna murrizten du

Fig. 4 Leaflet to promote oil recycling



Fig. 5 Letter to promote biodiesel among the municipal fleet





Donostia San Sebastián 19/01/2009

#### Estimados compañeros:

La preocupación por el cambio climático y las emisiones de CO2 son un tema de actualidad que alcanzan cualquier actividad en nuestra sociedad; industria, agricultura, construcción, hostelería...y también el transporte. Sólo el transporte en España es responsable del 30% de las emisiones anuales de CO2.

Como sabéis, el Ayuntamiento de Donostia San Sebastián es pionero en Europa en la promoción y la implementación de modos de movilidad sostenible en la ciudad. En este sentido, el ayuntamiento asume su responsabilidad y desde hace años viene aplicando medidas que minimizan el impacto de actividad vehículos motores sobre el medio ambiente. Entre otras destaca la utilización de biodiesel procedente de aceites reciclados en sus autobuses.

En este sentido es importante que la flota de vehículos municipales también participe de este esfuerzo y aplique dicha medida. La empresa suministradora del combustible a los vehículos municipales, posee surtidor de biodiesel en su estación de Anoeta. Por ello os instamos a que consumáis dicho combustible en los vehículos que utilicéis en vuestra labor profesional diaria, ya con ello contribuiremos no sólo a la sostenibilidad local en nuestra ciudad sino también a nivel global.

Muchas gracias

Gerardo Lertxundi

Director Departamento de Movilidad



#### 4.5 Future Plans

Once the campaign has finished, promotion of use of biofuels will continue in the city of Donostia San Sebastián. The technicians of the Dbus company will follow with their studies about use of this kind of fuel. The Dbus company are committed with this goal and they continue making tests in order to increase the use of biodiesel. On the other hand, it is planned that for next 2011, the hybrid technology will arrive to the Dbus company.

Awareness about the importance of recycling domestic cooking oil must continue among citizens in order to reduce the quantity of used oil thrown away and to improve the quantity of recycled oil. The Municipality and the Community are the two public administrations in charge of this aspect. The points to collect the oil follow their calendar and this kind of recycling is becoming more popular and assumed by the population.

It was disappointing that on the day campaign took place, the weather was awful. It was really miserable weather and probably contributed to having fewer people attend than if the weather was warm. This meant that our visibility was reduced We are considering promoting ourselves at the European Mobility Week, 16<sup>th</sup> -22<sup>nd</sup> September 2010 where we will have another opportunity to present ourselves and promote use of biofuels. It is just an idea. It has to be decided.















Fig. 6 Different press articles