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### About the European Cyclists' Federation

ECF is the umbrella federation of bicycle users' organisations in Europe and beyond. Our aim is to have more people cycling more often and we target to double cycling by 2020 in Europe. To reach this goal, we work with our members and partners on putting cycling on the agenda at global, European, national and regional level.



### **FOREWORD**

For the problems facing our cities, cycles are a key part of the solution. Air and noise pollution, traffic congestion, and the risk and danger associated with too many vans and trucks in city centres: all of these can be significantly improved with cyclelogistics solutions. Cities can save money by replacing motor vehicles with bikes, trikes, and cargo bikes, with electric support where needed. The benefits for companies include savings in cost and time and increased productivity.

The potential benefits and savings are significant. Cities wanting to improve their quality of life downtown have made streets car free, and they have seen how citizens take back the streets and how cycle based companies provide delivery.

This report, developed and produced by the European Cyclists' Federation (ECF), has collected the valuable experiences of many different stakeholders - cities, civil society, bicycle and delivery industry, and partners in EU-projects. It provides innovative and thought-provoking recommendations based on first-hand experiences which cities and municipalities have had with cyclelogistics solutions currently in place in many EU Member States. ECF has worked closely with its members and trusted partners for many years seeking cyclelogistics solutions. In that time many European cities have demonstrated the effectiveness and benefit to citizens and businesses of making shift from traditional motorized logistics to cyclelogistics.

We look forward to working with the European Commission to achieve the inclusion of these recommendations in the upcoming EU guidelines on Urban Logistics. Additionally, we will work with our members, and our networks, especially ECF Cities for Cyclists, on promoting the implementation of the recommendations that have been derived from this review, which will help mainstreaming their uptake. We expect to see goods delivered by cycle far beyond the cities where bikes are already part of the logistics system, in cities and municipalities all across the European Union.

Dr. Bernhard Ensink Secretary General European Cyclists' Federation



### **INTRODUCTION**

In the EU White Paper on Transport, the European Union has set very concrete targets to improve goods delivery in cities: the Commission wants to achieve essentially CO2-free city logistics in major urban centres by 2030. The complexity along with the radically changing and evolving nature of urban logistics means that a mix of different measures is necessary to achieve significant benefits of increased sustainability and energy efficiency in urban logistics (Civitas Policy Notes <sup>1</sup>).

ECF is convinced that deliveries by (e-)cycles and (e-)cargo-cycles can contribute to this target while ensuring the vitality and the needs of the city, its shops and residents. The baseline study <sup>2</sup> of the European project named CycleLogistics <sup>3</sup> shows the clear potential of logistics by cycle: 51% of all motorized trips, including private and commercial trips, in European cities related to the transport of goods can be switched to bikes. Of the joint potential 31% are commercial and 69% are private trips.

A recent study in **Berlin** calculated that 42% of inner-city courier shipments could be transported by e-cycle assuming a maximum shipment distance threshold of 10 km  $^4$ . A threshold of 20 km would extend this potential to 68% of all courier shipments and 48% of the resulting mileage.

There are already numerous examples in European cities that demonstrate the effectiveness and benefits, both for cities and businesses, to shift from traditional motorized logistics to cyclelogistics. ECF has collected valuable experiences of different stakeholders – experts from cities, civil society, partners in EU-projects, cycle and delivery industry – by means of a roundtable and active contribution in these Recommendations on cyclelogistics. The various experts have highlighted the following success stories, best practices and results to share with the European Commission and European cities.

ECF presents the Recommendations on cyclelogistics to the European Commission in the context of Non-Binding Guidance Documents on Urban Logistics, which are currently being prepared. We hope that all over Europe, cyclelogistics will be implemented faster and more efficiently thanks to the lessons learnt in pioneer cities and businesses.

# 1. DO IT YOURSELF: SET THE EXAMPLE AND RAISE AWARENESS FOR CYCLELOGISTICS



The potential of cyclelogistics is not widely known yet and therefore needs more promotion. Local, regional and national governments can take a leadership role to introduce cyclelogistics into everyday life and contribute to mainstream it by being direct users of cycles, cargo bikes & e-bikes. They can in particular make use of such cycles or cyclelogistics operators for many different duties, carried out by publicly-owned or already contracted companies, including:

- Street cleaning and maintenance
- Collection of waste and recyclable materials
- Parks maintenance
- Internal post / document transfer service
- Integration of cargo bikes in public fleets
- Deliveries to public sector buildings (e.g. schools, hospitals, universities, etc.)
- Police patrols: advantage of speed and easy access to all city spaces (eg. including parks, congested roads, etc.)

In June 2015, the street cleaning company Ocean Concept in Nîmes (France) introduced 15 e-cargo-bikes. This was part of a 3,8 million Euros investment in 70 new electric vehicles of different types 5 .: the municipality showed the newly acquired vehicles to the inhabitants and press, which is also important to raise awareness for cyclelogistics. Zadar (Croatia), Graz (Austria), Strasbourg 6 (France) and Ahlen 7 (Germany) are other cities that use e-cargo-cycles for street cleaning. In the context of the EU-project Pro-E-Bike 8, the Swedish city of Motala (Sweden) tested and bought 4 electric bikes for home care service and 10 cargo bikes for childcare. The bikes were also used in winter, equipped with winter tires, and replaced between 2,000 and 7,500 km of car trips. Five other municipalities other municipalities in the region have followed the example of Motala and have bought more e-bikes for various departments such as environmental management,

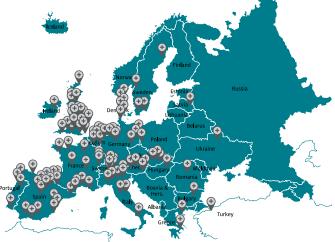
health care and school.

**Brussels** (Belgium) police bike units have reported they are especially well suited to deal with a wide variety of standard police tasks. Moreover they stated to be even better suited than car patrol units to deal with domestic disputes and disagreement between neighbours. The bike police units have much more contact with pedestrians, residents and others, by being more approachable due to slower speeds, and being more accessible on a bike than in a car.

## 2. LET OTHERS DO IT FOR YOU: GET YOUR PUBLIC PROCUREMENT SETTINGS RIGHT



A crucial tool to indirectly favor outsourced cycle-based delivery services are cycle friendly policies in public procurement calls. Municipalities can outsource selected duties directly to existing and local cycle based companies that are popping up all over Europe, as the map of the European Cycle Logistics Federation shows  $^9$ . Additionally, the requirement of CO2 neutral deliveries in all tenders that entail deliveries and the quantification of this demand in the evaluation are recommended.



In the UK, the **Cambridge** City Council outsourced their internal mail delivery to local cyclelogistics operator Outspoken Delivery <sup>10</sup> in order to prove that the work could be done using cargo bikes. This work was previously being undertaken by 2 full time employees and a van. The outsourcing was subject to a tendering process where the tender document was edited and changed so as not to preclude cyclelogistics solutions. Simple changes can already be significant for example, when asking about the fleet of the tenderers, it is recommended not only to include tick boxes saying petrol vehicle, diesel vehicle, but also to include a specific item for cargo bikes/trikes. In total, Outspoken Deliveries couriers cycled 100,000 km, saved 45 tonnes of CO2 in 2014 and received a lot of praise from its clients.

In 2005, the **Brighton & Hove** City Council (UK) contracted deliveries to the cycle courier company The Bike's the Business <sup>11</sup>. This reduced the number of motor vehicles used in the councils' in-house postal and courier service by one seventh, saved emissions and money on vehicles and fuel and improved the overall speed of deliveries <sup>12</sup>.

## 3. INITIATE PILOT PROJECTS AND ENGAGE WITH STAKEHOLDERS



Temporary pilot projects with testing opportunities are very efficient to take away prejudices or fears about using e-(cargo-) bikes concerning the weather, the load capacity, the battery range, etc. Especially long term testing is a must (year round) to overcome seasonal prejudices and testing the cycles in real-world working circumstances. Pilot projects allow local governments to engage with stakeholders such as Chambers of Commerce, shopkeepers, transport companies and also cyclists organisations in a positive way.

In **Zagreb** (Croatia) the European project PRO-E-BIKE offered a subsidized e-bike trial for Postal services <sup>13</sup>. After the trial period, the Croatian Post launched a €492 000 procurement deal in which they bought a fleet of 180 e-bikes to replace an equal number of

scooters. Subsidies for the purchase came from the Environmental Protection and Energy Efficiency Fund (EPEEF) <sup>14</sup>. It is the central point for collecting and investing extra budgetary resources in projects related to environmental and nature protection, energy efficiency and use of renewable energy sources. Main sources of funding include:

- · Charges on polluters of the environment,
- · Charges on users of the environment,
- · Charges on burdening the environment with waste,
- Special environmental charges for motor vehicles.

Moreover, the PRO-E-BIKE project reported that an average of more than 80% of the e-bikes tested by businesses and municipalities concluded with the continuation of the use of the vehicles. In Croatia, 89% of the companies that tested e-bikes continued using e-bikes - either rented them, bought them or upscaled their fleet - after the pilot project. PRO-E-BIKE cities in the Netherlands, Sweden and Spain have 100% continuation results after the testing. Another advantage of pilot projects is that they can be expanded with time and growing interest. At the beginning of the PRO-E-BIKE project, the goal was to test e-bikes in 3 companies per country. As the project evolved the interest grew as is visible in final numbers.

PRO-E-BIKE has also developed an easy-to-use e-bike simulation tool <sup>15</sup> for companies and public bodies that have a fleet. This tool aims at enabling potential users to simulate the impact of e-bikes, and analyzes the potential benefits in terms of costs and emissions that can result from the introduction of e-bikes in their business.

Another type of pilot project can be found in the UK. In partnership with the National Cycling Charity CTC and cyclelogistics, **London** Bike Hub operated a cargo trike scheme in the **London** Borough of Hounslow. This scheme was offered on a trial base for individuals, community groups and businesses before joining a paid for membership scheme. The trial demonstrated several outcomes:

- **London** Bike Hub sees the use of cargo bikes as adding value to almost any business, for example providing new services such as collect or delivery options as well as extending current services, for example selling products beyond the shop front;
- Small businesses were not very interested in the direct use of cargo bikes. Their staff is full time operating the company and does not have capacity to use cargo bikes. Many small businesses however, were very keen on a third party to undertake the work for them;
- Storage of large cargo bikes is a problem both for the operator and user;
- Purchase of cargo bikes is a barrier;
- The membership scheme needed refinement but in summary involves a yearly cost which includes a fixed number of hire periods, normally half day slots;
- a robust hire system in terms of insurance, proof of identity and deposits is important;
- advice on handling and security needs to be factored into first time hire users;
- a wide variety of payloads were seen, the most common being



COUNTRY	NO. OF COMPANIES	NO. OF E-BIKES	TESTING PERIOD (MONTHS)	% CONTINUING
Netherlands	5	10	12	100%
Sweden	5	20	12	100%
Spain	3	3	6	100%
Croatia	9	21	6-12	89%
Italy	4	7	6-12	75%
Portugal	5	7	6-12	20% (so far)
Slovenia	8	6	3-9	13%

Although the trial in Hounslow has ended, **London** Bike Hub now operates a similar one in a neighbouring Borough of Ealing with the support of the council. Currently the scheme is free of charge with no plans short term to introduce a membership fee or hourly costs.

In November 2014 the city of **Munich** (Germany) and the local Chamber of Commerce started a one year cargo bike test program with 13 smaller businesses. Participants received a lot of local media attention and the Chamber of Commerce now offers detailed online information on cargo bikes as part of its long term efforts to promote cargo bikes in commercial transport <sup>16</sup>.

A widespread measure, used in many European cities to stimulate the take up of cyclelogistics in businesses is to offer a buyer's premium. Subsidies for purchase or hire have a good return on investment and a long term positive effect. Rates of the premium can vary between 25% and 50% and are often combined with a maximum of 1.000 Euros.

The city of Graz (Austria) pays a buyer's premium for cargo bikes without electric assist of 50% with a maximum of 1,000 Euros <sup>17</sup>. The City Council of **Munich** (Germany) decided in December 2015 to introduce a buyer's premium for businesses and associations that buy electric vehicles and explicitly mentions e-cargo bikes. A total budget of 22 million Euros is available to subsidize 25% of the purchasing price, with a maximum of 1000€. An additional bonus of 1,000 Euros can be received if it is proven that a conventional vehicle has been permanently replaced <sup>18</sup>. In **Brussels** (Belgium), the Ministry of Work & Economy subsidized businesses who invested in cargo bike delivery. L'Heureux Nouveau <sup>19</sup> received 50% subsidies for buying its cargo-bikes to deliver organic fruit and vegetables.

### 4. TRANSFORM YOUR CITY CENTRE: LIMIT MOTORIZED VEHICLES WHILE KEEPING THE CITY ACCESSIBLE

Regulatory measures to reduce the number of fossil-fuel powered vehicles which enter, transit or circulate in areas like (historical) city centres, business districts, residential areas, etc. have proven to be very effective to boost cyclelogistics and have been demonstrated in several European cities. Installing time restrictions or congestion charges for motorized vehicles, low emission zones or and allowing uninterrupted access for bikes is a big business advantage for cyclelogistics delivery companies.



The parallel implementation of cyclelogistics solutions in the areas where restrictions are in force can be a perfect complement, creating a real win-win strategy. These are the most promising implementations in terms of effectiveness with the beneficial results of reduced congestion, air and noise pollution.

An important remark is that access restrictions should not limit cycle transport. Currently, this policy tends to vary in cities. In **Milan** (Italy), all cycles are allowed in the pedestrian zone. In **Brussels** (Belgium), all cycles are allowed in pedestrian zone but need to respect a speed limit of 5km/h. However, in **Donostia-San Sebastian** (Spain) only cycle-delivery professionals are allowed to cycle in the pedestrian zones during the time restrictions for motorized vehicles and normal cyclists.

Full access restriction to the historic centre of **Vicenza** (Italy) in 2008 made GLS change from car to cycle delivery. GLS imported cargo bikes from the **Netherlands** as the solution to the restrictions. Currently GLS uses 3.000 vans and 50 cycles in Italy. GLS deliveries in Italy are growing (doubled volume), mostly because of growing B2C deliveries. Ca. 30-40% more deliveries on Mondays due to e-commerce peak of people ordering online

during the weekend: it is difficult to deal with this peak period, but possible thanks to extra, temporary manpower on cargo bikes. GLS can also offer new services thanks to cycle-delivery: same day deliveries are introduced.

The change from car to bike delivery proved to be a successful business model for GLS: it is not only environmental friendly and cheaper but this high value service generates profit too. The main advantages are: lower employee costs (because of lower qualifications needed), it is easy to call on temporary employees (no drivers' or delivery license needed) and faster deliveries. An additional benefit for society is the creation of employment for young people. GLS plans to expand this service in Italy and in other countries where it operates.

Milan (Italy) adopted the "AREA C" scheme - C stands for congestion charge - a combined Low Emission Zobe and urban road charging scheme in the central area. The scheme entered into force on 1st January 2012 when the previous ECOPASS scheme (a pollution charge scheme) stopped working. The road charging scheme operates on weekdays, from 07:30 am - 7:30 pm, Thursdays from 07:30 - 6:00 pm and does not operate on weekends or bank holidays. The fee is 5 euros for all vehicles.

The payment allows users to travel for the whole day in the area to which the charge relates. Special terms are apply to registered duty vehicles (5 euro ticket for entrance plus two hours of free parking, or a 3 euro ticket for entrance only - with no parking facilities). Entrance is forbidden for gasoline pre-EURO and diesel pre-EURO, EURO1 and EURO2 vehicles. The decline in the number of cars has led to a significant reduction in harmful emissions, particularly black carbon (-30%), a component of particulate matter considered by experts to be the most toxic to human health. Congestion charge area is one of the main reasons mentioned by GLS for the creation of a logistics platform fully dedicated to e-vehicles (both e-vans and e-bikes). Furthermore, after 2011, several bike messaging services spread out in **Milan**. Area C seems to encourage both big companies using e-bikes and

In **Gothenburg** (Sweden), normal deliveries with vans and lorries are only allowed between 5am and 10am on the most crowded streets. The city started a pilot delivery scheme called Stadsleveransen in 2012, which initially served just eight clients when it was launched. Now in 2015, almost 500 businesses take part – from small offices to major retailers – and more than 350 packages are delivered each day by cargo-bikes or light electric vehicles. Stadsleveransen, part-financed by the EU's Smartset project <sup>20</sup>, accounts for 20% of the goods volume in the area where it operates, but it handles the majority of deliveries.

microenterprises starting their bike delivery activities.

Bubble Post <sup>21</sup> is a 3-year old Belgian cyclelogistics company that started in **Ghent** (Belgium), motivated by the advantage of unrestricted access to the city centre in which time zones are limiting deliveries. Their business operates in city centres average +100000 inhabitants. They have warehouses just outside of the city center where the goods are unloaded from trucks, put into efficient trips via their IT-system and subsequently they bring the parcels (all types, dry, cooled,...) into the city with ecological vehicles (e-trikes and e-vans). Bubble Post is active in 15 cities in Belgium and the Netherlands and is developing a European network, with a planned beginning 2016. Today, they have 120 full time employees.

The simple economic case is sufficient to convince certain big logistics operators, such as DHL in the **Netherlands**, of the use of cyclelogistics. Depending on local requirements, different bicycle models are being used: city bikes are used by couriers

carrying backpacks for document deliveries, cargo bikes with a lockable transport box and a holding capacity of 140 liters are perfect for parcel deliveries, and recent test include the "Cubicycle", a quadracycle with a removable container with a cargo volume of one cubic meter that can transport up to 125kg of shipments <sup>22</sup>.

Arne Melse, OPS Field Support Specialist explains the motivation of DHL to switch to cyclelogistics: "Cycling in the inner city actually saves time and money and DHL has plans to expand its pilot programs in more cities and more countries. Thanks to the cargo bikes (33 cargo bikes in 19 Dutch cities), DHL trucks travel 20,000 km less for deliveries due to easier access to cities and we save 430,000 Euros per year. New pilot programs in **Athens, Luxembourg, Vienna and Milan** have been put in place. Reduced costs, employees that are less stressed, saving time and distance covered – all these economically viable arguments increase our commitment" <sup>23</sup>.

### 5. COMBINE ACCESS RESTRICTIONS WITH NEW FACILITIES



Some pioneer cities have already tested solutions in the field of urban freight consolidation. This focuses on bundling goods close to the reception points though logistical platforms located either at the borders or smaller ones in the heart of urban areas. These facilities, also known as urban (micro-)consolidation centres are emerging in densely populated areas as additional transshipment points because of a rising demand coming from the private sector, less often because linked to public initiatives addressed to limit the number of freight vehicles in cities.

Urban consolidation centres serve as typical warehouses for consolidating and bundling goods and for organizing last-mile deliveries with smaller and cleaner vehicles. We might refer to cyclelogistics (micro-)consolidation hubs to characterize where cargo bikes or high-volume freight cycles (e.g. pedal assisted tricycles) are used. These centres generally include space for short-term storage, sorting, freight-tricycle entry/exit and secure parking, loading/unloading operations, limited warehousing, office and a rest area for riders.

Key features of consolidation centres to bear in mind: Identify and adapt appropriate public spaces linked to cycle-based last-mile services:

- Involve logistics companies in the decision making process.
- Establish a good spread in order to have an optimal delivery range.

- Foresee the possibility to accommodate at least one larger freight vehicle like a truck or 1 to 2 vans, e.g. through additional parking and manoeuvring space or availability of on-street loading bays.
- Secure space for (micro-)hubs in policy planning and zoning strategies.

The remainder (47) reported that the use of the HEAT was voluntary. Some had discovered it through academic routes, others had used it for occasional calculations or to demonstrate the tool to others.

Test low-cost indoor facilities or mobile micro-hubs in cooperation with cyclelogistics companies.

- Small warehouses or commercial/artisan properties
- Retailers of packing, shipping, postal, printing and business services (e.g. UPS Store or Mail Boxes) with appropriate back room space.
- Parking garages
- Secured ground floor spaces in railway stations or other public infrastructures.
- Shipping containers and other mobile depots Other facilities might incorporate a transshipping function but without the basic features of a micro-hub (consolidation and cargo bike parking):
- On-street automated parcel stations (e.g. DHL Packstations or the Bentobox).
- On-street loading bays offering both van and cargo bike parking space.
- Kiosks or other convenience shops.

Promote strategies or incentives for shared (micro-)consolidation centres.

In **Parma** (Italy), the basic idea of the ECOLOGISTICS scheme is to allow operators to choose between two options for accessing the city centre.

Vehicles are allowed to enter the city centre if they meet specific requirements regarding the type of goods transported, the use of eco-friendly fuels (CNG, bi-fuel or electric and/or Euro 3, 4, 5), vehicles that not exceeding 3.5 tonnes, a threshold value loading factor of at least 70% and the use of a location system for vehicle traceability.

Alternatively, they simply do not have access to the city centre and unload their goods at the CAL platform: goods are then consolidated and delivered in the city centre by the ECO CITY service.

In February 2015, the inter-trade organisation of international courier companies in **Germany**, Bundesverband Paket & Expresslogistik (BIEK) published a study on sustainable urban parcel delivery. The study recommends the combination of micro-depots and cargo bikes in dense urban areas. These micro depots could also be used cooperatively by more than one company according to the study. Such a system would serve the interests of the courier companies, the retailers as well as the municipalities but needs a successful local dialogue between these stakeholders before being set-up <sup>24</sup>

The first pilot projects confirm the success of micro-depots. The city of **Berlin** (Germany), one of the partners in the European

CityLog project  $^{25}$  on sustainability and efficiency of citylogistics, worked with a local courier company that uses cargo bikes, cars and vans. In a test period of seven weeks in winter 2011/2012 a micro-consolidation center (BentoBox) was integrated into the company's daily operations in one part of the city. The test showed that 85% of all previous deliveries by cars could be substituted by cargo bikes  $^{26}$ .

In 2012 the City of **Hamburg** and UPS started a pilot project that allows UPS to use cargo bikes for inner city deliveries. UPS received and pays for a special permit to use public street space for a container that serves as mobile depot. This container is brought from the regional UPS depot into the city by lorry in the morning, parcels then are delivered by cargo bike and hand truck. They also collect outgoing packages and finally a lorry takes the container back to the regional depot outside the city. In January 2015 three additional inner city micro depot sites were added to the successful pilot project. According to UPS, the pilot project should replace 12 conventional delivery vans and will be set-up in other German cities as well <sup>27</sup>.

### CYCLING PROMOTION AND MODE SHIFT



Promoting cyclelogistics has much in common with promoting cycling. Therefore, one of the key recommendations for cities is to invest in a wide range of cycling measures.

The best cycling cities have a high level of active mobility (walking & cycling) and a coherent network consisting of safe, direct, comfortable and attractive routes. The key success factors of a cycling policy culture are:

- a long term commitment to an integrated cycling policy,
- cycling policy institutionally integrated in urban management & planning,

· monitoring and researching cycling.

Key success factors on the road to becoming a good cycling city are different for starter, climber and champion cities.

For starter cities (where cycling is unsafe and not respected and where on most roads and street traffic is too dense and fast to cycle safely) key success factors are:

- · Selecting high-potential neighbourhoods
- Traffic reduction and traffic calming in neighbourhoods
- Basic level of on-street parking for cycles

For climber cities (where cycling is safe and convenient in many areas of the city and the cycling rate is such that cyclists are a visible presence in the urban landscape) key success factors are:

- Improving network cohesion: linking up safe cycling areas
- Creating high-quality and high-profile links on separate cycle tracks to form a backbone of major routes
- Tackling key obstacles: safe crossings, cycle bridges and cycle tunnels can open up high-potential, cycling routes away from traffic
- · Making the network more fine-meshed
- · Creating a cycle friendly city center
- · Providing public bikes
- Providing safe cycle storage facilities, especially at transport hubs

For champion cities (where most short distance trips are made on foot or by cycle and a city-wide fine-meshed cycle network is in place) key success factors are:

- Maintenance of the cycling infrastructure to keep it in good condition and useable in all weather conditions
- Upgrading infrastructure to adapt to rising intensity of use. Lanes to be converted to tracks, tracks to be widened, further shifting space from individual motorized transport to cycles, for instance by taking out traffic lanes or parking lanes, avoid sharp turns at intersections, .
- Improving cycling flow and speed to accommodate larger numbers on main links: conflict-free cycle highways, right-of-way for cycle crossings.
- High-profile dedicated infrastructure. Long-span cycle bridges can create new links and become landmark architecture.
- Transport hubs become large-scale cycle stations, combining parking and services.

Some special attention on the infrastructure side to facilitate cyclelogistics is to make cycle lanes wide enough and to avoid sharp turns. Besides making sure the hard ware is adapted, cities can also actively support cycling education, by supporting organisations or schools to train citizens how to drive with a heavily loaded cargo bike with electric assistance. Training and a mental shift is also needed for logistics drivers that were previously used to trucks, vans and cars.

## 7. WHAT CAN THE EU DO TO HELP CITIES RAISE AWARENESS ON CYCLELOGISTICS?

In the White Paper on Transport (2011) the European Commission set 10 goals for a competitive and resource-efficient transport system: benchmarks for achieving the 60% GHG emission reduction target. The first one is to halve the use of 'convention ally fuelled' cars in urban transport by 2030 <sup>28</sup>, phase them out in cities by 2050 and achieve essentially CO2-free city logistics



in major urban centres by 2030. A great impulse to a greener city logistics and e-bikes, cargo bikes and trikes can deliver a substantial contribution to reach this target.

- As all other levels of government, the European Institutions can set the example and change its own internal public procurement policies in favour of cyclelogistics requiring CO2-free deliveries.
- Give a high-level push towards mainstreaming cyclelogistics. It is a fact that there is uneven awareness of the many time and money-saving cyclelogistics solutions for cities. Some transport studies do not even mention cycles as an option for transporting goods, for example the recently published Belgian Perspective on transport for 2030 . ECF is convinced that this is merely an oversight which can be corrected quite quickly in most European cities. Achieving this requires a much higher level of awareness and active promotion. Successful pilots and small scale projects which are ripe for upscaling should be presented at mainstream transport conferences, as well as at those focusing on cities, e.g. CIVITAS.
- Support the collection of good data on cyclelogistics. There is a lack of specific data on companies, employees, money, volume & weight transported by bikes.
- The work of the European Cycle Logistics Federation (ECLF <sup>29</sup>), a professional special interest group of cycle logistics companies across Europe should be supported and more widely promoted in order to improve and expand their range of operations.
- Given the importance which cyclelogistics projects have shown in creating a positive dialogue with stakeholders, the EU should build on the success by funding upscaling and mainstreaming of successful schemes.
- Where appropriate, the EU should consider financing new pilot projects, for example:
- > For SME active in cyclelogistics
- > Enable/encourage cities to give incentives for businesses to work with cyclelogistics
- > Further testing of access restrictions combined with research of its effects on cyclelogistics
- > Testing and exchange best practices of urban consolidation centres
- > Pilot projects about intermodal facilities including cyclelogistics
- > Support research on more evidence for the cyclelogistics case eg. in the SMART City or Horizon 2020 research programs
- Stimulate the creation of a good cycling culture in all EU cities:
- Integrate cycling at all policy levels, including at EU-level
   dedicate more EU-funding to invest in cycling infrastructure and promotion
- Encourage cities to remove regulatory barriers for cyclelogistics (eg. cargo bikes not allowed in some pedestrian parts) in urban logistics guidelines
- Ensure that Member States include cyclelogistics in their national transport plans





### **CONCLUSION**

#### Cities: Show leadership and Start saving money

Cycle based delivery, aka cyclelogistics is a key solution to many of the transportation problems facing European cities. Cities and businesses save money by replacing motor vehicles with cycles for services they provide. City authorities should use their authority and resources available to start shifting trips to cycle delivery.

Based on first-hand experiences which cities and municipalities and related stakeholders have had with cyclelogistics solutions currently in place in many EU Member States we offer the following summary conclusions.

- 1. Purchase or lease bikes to use for the delivery of city and municipal services in ways shown to work in cities across Europe.
- 2. Modify or adapt procurement policies and procedures to allow, encourage or promote cyclelogistics operators to provide delivery and logistics services by cycle.
- 3. Trial or test periods have been shown to be an effective means of instituting cyclelogistics actions especially in places where they are considered novel. Provide free or low cost trials of bikes suitable for deliveries to businesses and citizens. Let them try before they buy.
- 4. Give back public space to the people. Institute access restrictions which restrict, limit or completely exclude motor vehicle delivery, and which allow or promote delivery by cycle. The recommendation for different types of access restrictions, including car free streets and city centres is one of the most effective means of promoting cycle based companies. It is recommend to test access restrictions for a sufficient period of time e.g. 6 months to 1 year.
- 5. Coordinate all of these different actions so they occur simultaneously. This will kick-start the process.
- 6. Promote the new city policies and practices sufficiently, to inform all relevant segments of the business community and citizenry.

It is a fact that there is uneven awareness of the many time and money-saving cyclelogistics solutions for cities. Some transport studies do not even mention cycles as an option for transporting goods, for example the recently published Belgian Perspective on transport for 2030 30. ECF is convinced that this is merely an oversight which can be corrected very quickly in most European cities by following the recommendations made here.

Many European cities have demonstrated the effectiveness and benefit to citizens and businesses of making shift from traditional motorized logistics to cyclelogistics. These well-regarded experiences of many different stakeholders show how these recommendations will help mainstream cyclelogistics in cities across the European Union.

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- 4. Gruber, J., Kihm, A., Lenz, B. (2014). A new vehicle for urban freight? An exante evaluation of electric cargo bikes in courier services. Research in Transportation Business & Management, 2014, 11, 53-62. 5 Local newspaper Objectif Gard, 20.06.2015: NÎMES La ville se dote de 70 nouveaux véhicules de nettoiement http://www.objectifgard.com/2015/06/20/nimes-la-ville-se-dote-de-70-nouveaux-vehiculesde-nettoiement/ The e-cargo trike on Ocean Concept's webpage in English: http://www.ocean-concept.com/english/cleantrike.htm
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- 7 http://www.bauhof-online.de/themenwelten/d/10834/?cHash=8517b343d17504ed53e89c6a7aa05455
- 8 http://www.pro-e-bike.org/
- 9 http://federation.cyclelogistics.eu/members 10 http://www.outspokendelivery.co.uk/wp/ 11 http://www.thebikesthebusiness.co.uk/
- 12 Brighton & Hove City Council sustainable in-house postal and courier service, in: Local government Association, August 2008: cutting through the green tape the power councils have to tackle climate change http://www.local.gov.uk/c/document\_library/get\_file?uuid=ca565212-b45f-4972-b065-292d28b79e3a&groupId=10180#page=10 13 http://www.ecf.com/news/encouraging-signs-from-croatia-the-national-post-buys-180-e-bikes/
- 14 The text of the tender is here http://www.fzoeu.hr/docs/tekst\_javnog\_poziva\_enu122015\_v1.pdf
- 15 http://www.pro-e-bike.org/publications2/
  16 Webpage of IHK München und Oberbayern "Lastenfahrräder im Wirtschaftsverkehr Umweltfreundliche Transportmittel in der Citylogistik" www.muenchen.ihk.de > Standortpolitik > Verkehr > Stadtverkehr > Umweltmanagement > Lastenfahrräder im Wirtschaftsverkehr
- 17 Webpage of the municipality including link to the application form:
- "Fahrrad-Förderung: Lastenfahrräder" http://www.graz.at/cms/beitrag/10175977/360817/
- 18 http://cargobike.jetzt/muenchen-geht-voran-bis-zu-2000-euro-kaufpraemie-fuer-e-cargobikes/
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- 20 http://smartset-project.eu/ 21 http://bubblepost.be/
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