

# CARGO BIKES

## AN ASSET FOR A SUSTAINABLE TRANSPORT SYSTEM

Guidelines for cities and municipalities for using  
and promoting cargo bikes as a way of achieving  
climate targets



These guidelines aim to provide an overview of why and how to introduce and promote cargo bikes in your municipality or agency, and encourage the use of cargo bikes by residents or organizations. Its content was developed based on experiences from the CoBiUM South Baltic programme and the expertise of the partners involved.

The guidelines consist of five parts

- An overview, contextualizing cargo bikes in the general transport system.
- General considerations when planning to work with cargo bikes
- Step-by-step guidelines for introducing cargo bikes
  - In a municipal department/organization
  - In bike libraries serving residents and organizations
  - For business purposes
- Promotion and communication
- Challenges and solutions



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# 1. INTRODUCTION

In larger cities in Europe, cargo bikes are a common means of transportation nowadays. But even in smaller cities, cargo bikes can be a key component of a sustainable and efficient transport system. Cargo bikes are not new, but they have been re-invented with better technology and an electric assistance that makes them more suitable as part of a sustainable transport system. Cargo bikes bring benefits far beyond the reduction of CO<sub>2</sub> emissions - from overall sustainability issues to social and individual health benefits.



## The challenge

We are at a time in which a transition to a sustainable transport system is essential. Aspects like improved air quality, optimizing spaces and reducing automobile traffic in an effort to create a better quality of life for residents are a challenge to be tackled.

An urgent part of the challenge focuses on CO<sub>2</sub> emissions, as well as fossil fuel dependency. The transport sector contributes 24% of the total global emissions. When we focus solely on the transportation sector, the transport of passengers and goods represents 74% of the sector emissions.

The average emissions per capita in different European countries range from 4 to 10 tons<sup>1</sup> of carbon dioxide equivalents per year, which is far above the level of 1-2 tons of CO<sub>2</sub> equivalents per person and year regarded to be sustainable.



## Cargo bikes - a part of a sustainable transport system

Transport is about moving people or cargo from one point to another. There are several different transport systems (bus, trains, plane, bike systems) and it is crucial for those systems work together to create a sustainable transport system.

For municipalities to achieve their energy and climate goals, all the different parts need to work together, including public transport, cycling, school transport, freight transport, logistics and rail. Transforming and integrating those systems into a climate-smart transport system requires alternatives to replace fossil fuels and car dependency to achieve a more sustainable social development. One piece of this puzzle is electrically assisted cargo bikes, which have more potential than a bicycle to replace car journeys in communities.

A key aspect when planning transport systems is to consider the full journey – “door to door”. This makes it is easier to visualize strategies

and meeting points for the various transportation modes. In future city and mobility planning, the key is to understand travel patterns and needs. People do not move in a straight line; they make stops at schools, supermarkets, work meetings. etc.

Cargo bikes can provide a flexible, pick up and go mode of transport for day-to-day mobility. When we consider that 80% all car trips within urban areas are shorter than 5 km, we can see a niche for cargo bikes. By even partially replacing travel by car or local cargo distribution by lorries, it is possible to achieve both reduced climate impact and obtain health benefits.

Cargo bikes are on the rise as a part of the solution of tackling those short distances and last mile solutions<sup>2</sup>. This could lead to these new types of bicycles becoming an increasingly important solution for the city's logistics as well as for freight transport. These vehicles are thus becoming an important component in the solution of future logistics and transport in our cities. There is already an increased interest in cargo bikes and a number of companies are working to design bikes that can carry heavier cargo.



We all know that a sustainable transport system does not happen overnight, but where do we start? In the CoBiUM project, our focus has been on creating awareness of cargo bikes and showing how they can work in everyday life through lending schemes aimed at residents, businesses, and municipal services.

## Positive impacts and benefits

One benefit is that cargo bikes can be faster and much more flexible than cars and lorries in terms of potential routes, driving hours, and parking.

Other benefits of cargo bikes include reduced noise, reduced emissions, fewer accidents, and less traffic congestion. At the individual level, there are benefits in a more efficient economy, improved fitness, and health. For companies, investing in cargo bikes can lead to lower costs by replacing part of the car fleet. It can also lead to healthier staff with lower rates of sickness and lower costs for transport and parking.

Cargo bikes can be used strategically in your work with sustainable development. Such a perspective will guide your decision and determine the efficiency of cargo bike use, as well as have a positive the social, economic, and environmental impact. For example, you can:

- Link it to Agenda 2030 as a part of reaching carbon dioxide reduction targets
- Improve the health of employees
- Save money on fuel and, in the long run, need fewer cars and mini lorries.

From a managerial or business perspective those different benefits can become indicators to help monitor the success of the introducing cargo bikes, from different angles.

## CoBiUM experiences

As part of our project, 19 cargo bikes were tracked, and 22,799 km were “cycled up” within two years. Many of these trips substituted for using a car.

Our data shows that, even though the “one way trip”, averages 2.5 km, daily use of the bikes averaged 7 km. It seems that more often than not a travel day consists of at least three stops or the cargo bikes are used several times a day.

In many of the CoBiUM pilot projects, we can see the potential for replacing car trips with bike trips. Simply by having access to the cargo bikes, some organizations completely replaced a car. Even the lowest usage categories reduced car use by 7%. That is a significant amount of CO<sub>2</sub> reduction if you upscale it to our society as a whole.



Photo by Albin Rylander

# Why should a city promote cargo bikes and take the lead in this transition?

Municipalities are key actors in the transition to a sustainable transport system, both within their own organization and as a driving force for residents and businesses:

1. Within municipalities and related services, such as schools, street cleaners, document transport, etc.
2. Residents who, as part of their daily go grocery shopping, take kids to schools, commute to work or travel to places in their leisure time.
3. Businesses, that deliver food or other material, or transport small cargo short distances.

Public bodies are usually big organizations with a broad field of activities and a large number of employees. By introducing the use of cargo bikes in their own organizations, municipalities send out a strong message. This sets the tone for, and affirms the seriousness of, their intentions to create a better transport system, and towards achieve sustainability goals such as Agenda 2030, CO<sub>2</sub> reduction.

Moreover, this is a way of raising awareness by showing that cargo bikes are well developed and offer a viable solution to multiple transport challenges.

Although this may sound like something for a distant future, it can be implemented now! Different campaigns and test programmes can create a sense of possibility and a momentum that will encourage people to be willing to try and invest in new solutions. This is leading by example at its best!

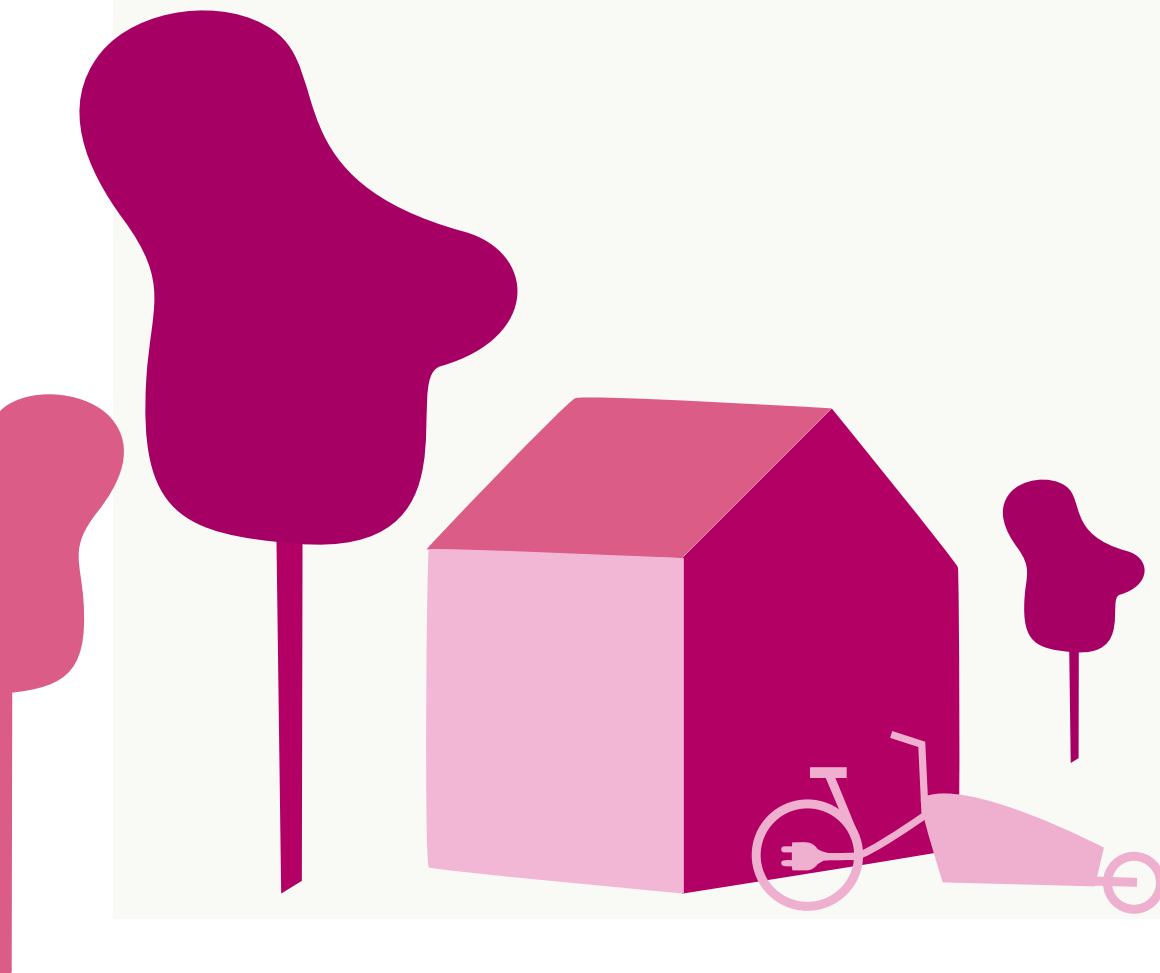
Sounds interesting? Let's go into a bit more detail about how to engage with each of the actors mentioned above.





## 2. PLANNING FOR CARGO BIKES

There are many models on the market. Unlike ordinary bikes, cargo bikes come in a much greater variety of forms and sizes. A good starting point is to ask yourself what you want to achieve.



## General uses

Cargo bikes are used for parcel services, food delivery, street, and park maintenance, and by janitors, electricians etc. There are movable cafés and libraries, and cargo bikes applications relating to social integration, for example at elderly homes, and pre-schools.

Moreover, cargo bikes are offered to residents and companies for a try-out period, a sort of bicycle library. That helps municipalities support awareness of cargo bikes as a realistic transport option by letting residents and businesses test different models. The cargo bike libraries can also function as an in-house mobility pool for the municipality.

Before you go out and buy a cargo bike, we would like to point out that there are many models on the market. Unlike ordinary bikes, cargo bikes come in a much greater variety of forms and sizes and may have two, three or four wheels. There are cargo bikes that are designed for specific services like carrying small boxes, tools, passengers, and more. It is therefore important to understand your needs in order to choose the best model.

There is also the question of the greater perspective.



Photo from the City of Gdynia

# What do you want to achieve?

Your goals may be to make your organization more sustainable, reduce CO<sub>2</sub> emissions, save costs, improve the health of your workers, or any of the other benefits derived from with adopting cargo bikes as a means of transportation. Regardless of all the potential benefits you may achieve, one question is essential: What functions will cargo bikes fill in your organization?

- Municipal services – shifting from cars to cargo bikes at certain points in the organization in order to achieve cost or climate benefits.
- Bike libraries – letting residents try out a cargo bike either before deciding on a purchase or just for learning about the possibilities.
- Businesses – promoting the shift to sustainable transports through a lending scheme.

Whatever your objective is, a strategic approach will increase the efficiency and chances of success of your project.

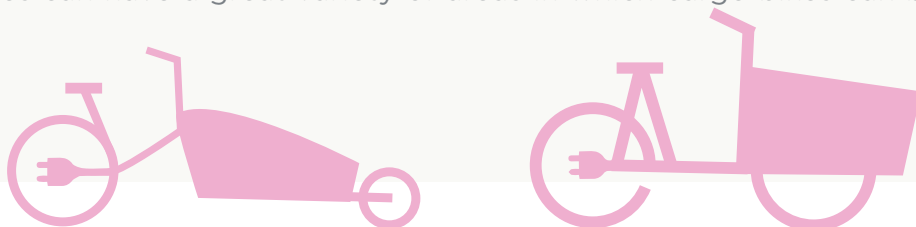
Start by focusing on specific needs, rather than on solutions. Consider the governing documents and policies of your organization. All your actions make a difference, so make sure they lead to a more sustainable community. See [cobium.eu](https://cobium.eu) for a decision flowchart.

It also beneficial to connect with organizations in other countries or regions that you can learn from or work together with.

## Identify potential areas of use

You cannot just buy a cargo bike for your organization and expect it to be used. You need to know when and where a cargo bike can be beneficial in your organization.

We recommend that you to start with the needs of a specific area, user or objective. It may be that you have a small organization, and the use for which the bike is intended is obvious. However, even small municipalities can have a great variety of areas in which cargo bikes can be used.



A parks department, for example, has specific needs and uses, that are different from those of a court involved in moving juridical documents. Perhaps you may need to transport food between locations or are carrying tools around as you go to various service points.

You may consider using a cargo bike when you have:

- Regular activities that transport or deliver cargo of any size, such as parcels, documents, tools, or furniture. Regular commutes between two offices to attend meetings, arrange elderly care visits, etc, are other possible uses
- Single occasions with time-limited transports of cargo, such as when moving office, shopping etc. In these situations, many persons within an organization may use the bike occasionally.

After identifying implementation areas, it is important to analyse the user needs, in order to increase popularity of this initiative in your organization. See [cobium.eu](https://cobium.eu) for a guide to identify user needs. This guide will also enable you to purchase the right type of cargo bike when comparing bikes with 2, 3 or 4 wheels, for example, or other specifications.

Then you can take the next step and survey the market. You can find out whether there are cargo bikes on the market that meets your needs or if you will need to modify them.



Photo by Albin Rylander

## Suitable and safe infrastructure

One recommendation for the planning phase is to check the infrastructure in locations where you plan to use the cargo bike. A cargo bike has some limitations that would not stop an ordinary bike, such as barriers and curbs that are fairly easy for bikes to negotiate but can present a big obstacle for cargo bikes.

## Costs to keep in mind

When planning for a cargo bike, there are factors in addition to purchase price that must be considered when putting together a budget:

- One time capital expenditures include the space or buildings needed for storing cargo bikes and the implementation of a sharing system, however basic.
- Repeated capital expenditures spent on the cargo bikes, like technical equipment of bike storing or renting spaces, locks and other material that must be renewed from time to time.
- Repeated ordinary expenses include software updates, maintenance, personnel, energy, insurance, marketing.

## Cargo bikes in municipal services

Using cargo bikes in municipal services is a good approach that improves visibility and raises public awareness. Different public areas and actors can be engaged in these uses, such as:

- Internal logistics services, such as mail and deliveries
- Collecting waste (possibly combined with various kinds of deliveries, in order to avoid empty trips runs)
- Transport for housing maintenance (e.g., janitorial services)
- Transport for street cleaners or street maintenance services
- Tools for park maintenance work and collecting rubbish in parks
- Pre-schools
- Libraries services (book deliveries or events)
- Municipal promotions and campaigns





## Where to start?

This journey can take many routes. Starting can be as simple as finding early adopters by contacting school heads or municipal department managers and working with them to develop a forerunner or pilot project.



## What early adopters say?

In Denmark, the a city mobility manager selected the pre-school Skovtrølden introduction to nature programme as a likely candidate because of its “outdoor kindergarten” feature that involves taking children on trips.

“Little kids can’t walk very long distances, making longer trips difficult to arrange. The bikes helped us move further with the kids and also give us the flexibility of not being dependent of the schedules and routes of public transportation.”.



## What is the impact?

The main impact of this sort of initiative demonstrating that the public sector is engaging in this transition and leading by example. Moreover, it gives first-hand experience in creating policies and city planning. Finally, it is an initiative that contributes to achieving sustainability goals and reducing emissions.



Photo by Albin Rylander

## Uses in business and organizations

As a large part of CO<sub>2</sub> emissions from cargo transport is produced in the last mile, involving businesses and other actors who run short cargo trips around town may be a valuable investment in achieving a better transport system and reaching sustainability goals.

Like municipalities, businesses and organizations transport goods and internal products that can instead be moved to cargo bikes: These functions include:

- Deliveries, such as food, products, parcels
- Services offered by carpenters, plumbers, cafés, etc.
- Internal transport of materials



### Where to start?

The municipal support is about offering an opportunity to test new ideas with very low risk to the business. The trick is to identify businesses or organizations that transport goods for relative short distances and offer them a bike that serve their needs.

For example, if it is a food company, a well-insulated cargo hold for hot or cold food may be needed. An electrician needs a cargo hold with compartments to place tools and material.

Make sure you make a clear agreement about the use of the bikes. For a business and organizations, we suggest a longer period of testing.



### What early adopters say?

Anja Hübner works for the animal shelter association in Greifswald, Germany. She expressed her surprise at how many people are curious and ask her questions. Interest in the bicycle leads to interest in the animal rescue association, so it is a perfect win-win situation. “People really like the bike; they even recognize it as I drive through the city. I guess it’s a real eye-catcher”.

The chairmen of the yacht club and the harbour in the small village of Bisserup in Denmark borrowed two cargo bikes as a CoBiUM pilot. The trial period has been a success. The two chairmen, Freddy Dahl Thomassen and Jens Christian Eskjær Jensen, are on the cargo bikes almost



every day and often many times per day. They use it to commute from home (2 km away) and for transporting tools, tasks that were previously done by car. They say that the cargo bikes are easy to use and can be parked close to the harbour. Moreover, the cargo bikes are easy to get around with, to travel on small trails and to take shortcuts.



## What is the impact?

Promoting cargo bikes for businesses is a way of kick-starting cargo bike use in the business sector. It allows businesses to see for themselves that it is possible to use cargo bikes to meet their transport needs sustainably.

In addition, the experiences gained from actual use and the reduction in in CO<sub>2</sub> emissions can provide information for policymakers in the areas of city planning, logistics and measures to achieve sustainability targets.

The two cargo bikes in Bisserup harbour replaced car use for 90 % of all trips by the two chairmen. This cargo bike use is estimated to have saved CO<sub>2</sub> emissions equivalent to those produced by 9,000 km of automobile driving.



Freddy Dahl Thomsen and Jens Christian Eskjær Jensen, chairmen of the yacht club and the harbour in the small village of Bisserup in Denmark. Photo by Slagelse Municipality.



## Bike libraries for residents

More and more municipalities are starting up bicycle libraries to increase the percentage of cyclists. Bicycle libraries are based on the same principle as libraries for books. In other words, it is free to borrow bicycles for a limited time. The size of the bicycle library determines the variety of models available.

Bike libraries provide the opportunity to change habits and travel patterns for a period of time. Another motive is to provide an opportunity to try an electric-assisted cargo bike (or other types of bikes) before making a purchase decision, as cargo bikes represent a sizeable investment.

Creating a bike library is a way to increase momentum, engaging residents in the transition to sustainable mobility, and thus reducing CO<sub>2</sub> emissions and providing other benefits.

Users can experience how a cargo bike can be integrated in their daily life, as well as try different models. This makes it more likely that people will be willing to invest in a cargo bike, since users would know what they were getting. Testing lowers the perceived risk of investment.



### Where to start?

Establish what your purpose and main outcome is. When we compare the three different bike library systems, we can see how the concept was adapted to different levels of interest and bike culture amongst the target group. Slupsk focused more on promotion and raising awareness, allowing people to use the bikes for up to a week. That enabled them to experience how cargo bikes work and feel to ride.



Photo by the City of Slupsk.

The bike library in Greifswald is more like a cargo bike pool that residents may use when they need to. For this reason, it had a lending period of only 1-3 days. The Växjö library is aimed at people who are interested in buying cargo bikes and would like to try different models, as well as test how a cargo bike would fit into their daily lives. Consequently, they can borrow bikes for longer periods (three weeks).

There are many details to consider when creating a bike library, from choosing different models, to arranging proper places for parking and maintenance, and designing a rental system. These tasks can be solved with collaboration, as it is shown by the bike library in Växjö, which developed a partnership with bike shops who would be responsible for the handling and servicing of the bikes.



### What early adopters say?

In the survey conducted by Växjö municipality, 141 respondents reported they could reduce car travel for commuting, transport of goods, travel with children or a combination of the three. Some participants reported that they would prefer to test other models before deciding, particularly for cargo bikes that can cost between 4,000 and 7,000 euro. Others preferred to lease a bike; a new service that has been developed at one of our participating shops.

For the bike shops, involvement in the project has given them the opportunity to test new markets, including bike types and manufacturers they would not otherwise have considered. New industry contacts were developed, and new customer segments established.



### What is the Impact?

In Växjö, the bicycle library is helping the city to grow into a cycling city, and results and experiences from the project will be reflected in the municipality's new transport plan to be issued in 2021.

In addition, the bike library created a real impact. A staggering 168 bookings during the whole test period (6 months) were booked in 24 hours! This resulted in 39% of participants considering buying a cargo bike.



## 4. IMPLEMENTING CARGO BIKE SYSTEMS

This chapter describes what to think about when setting up a cargo bike system, whether internal or external. It will explore:

- Procurement issues
- Booking system
- Parking places and storage
- Charging and equipment
- Maintenance



# Procurement

Now that you have done your user analysis, identified needs and your strategic objectives, the time has come to procure your cargo bike.

There are four main areas to consider:

1. Form and function of the cargo bike itself (cargo hold, motor, battery range, breaks, walk assistance et al)
2. Accessories and equipment (extra battery, locks, extra lamps, seat belts, cover, etc.)
3. Supplementary services (maintenance, insurance, profiling et al)
4. Sustainability, environmental or social objectives (2030 Agenda, circular economy, social enterprises et al)

See the procurement checklist at [cobium.eu](https://cobium.eu).

## Booking system (internal or for external users)

For those who expect multiple users and need some sort of booking system there are a few things to consider. If your system assigns each bike to a specific user during pre-determined work hours, skip directly to the parking and storage section on the next page.

A booking system can range from something as simple as a white board and a pen outside the bike garage to a dedicated public digital app.

### Calendar

It is important to have a very accessible and easy to find overview of cargo bike availability whether this is in digital or paper form. This allows for users to plan and book the bikes for use at their convenience.

### Access

Assuming that bikes will be stored and locked, the user will need some way to gain access to a bike. Make sure that they can get the keys for locks, gears, and access to bike garage, when they need it.



### **Opening hours**

If your system is not self-service, make sure the opening hours are adequate to your users' needs, and plan your internal organization to meet those needs.

### **Clear routines**

It is important that clear routines for equipment storage (lock, helmet, cover etc.) and charging are developed and enforced. After all, no one likes to get a vehicle without fuel. These principles are largely the same for any other vehicle you may use.

### **Instructions**

First time users need some sort of instructions on how to operate the bike. A cargo bike, especially a three-wheeler, has features you need to know about before riding it to ensure that the trip is well executed, and accidents are avoided.

## **CoBiUM examples**

### **Gdynia**

Reservations for rents were made via online web form, next step was a personal contact with interested persons and arranging a meeting to hand over the cargo bike.

### **Greifswald**

The city of Greifswald uses an Outlook calendar for internal use.

### **Public bike libraries**

The Greifswald LARA and the Växjö Bike Lab have developed and implemented online booking pages.

## **Parking and storage**

There are a few things to consider regarding parking and storage.

- Covered shelter – for durability and security
- Security and locking down – when out of home base
- Parking spot dimensions – access route to parking spot
- Location, location, location – easy access lowers the barriers

## Charging and equipment

Charging and equipment are a central issue for a smooth operation. If the bike is used by a single user, it is easy to establish responsibility. However, if more than one user is working with the bikes, then charging routines and handling of the equipment is essential to make the use seamless.

- Charge the battery as your park back in the garage is a good routine
- Keep the equipment stored in the bike:
  - Helmet
  - Rain gear
  - Charger
  - Bike load cover (if applicable)
  - Lock and keys/codes
- Washing routine: decide who, when and where.

## Maintenance

As is the case with any other vehicle, bikes need maintenance, so your planning must address this area if your initiative is to succeed.

### Technical expertise

The key question here is to find a partner that has ability to work with cargo bikes. This need for capacity and expertise may influence your choice of models. Most of the day-to-day maintenance can easily be done and overall, a cargo bike is not that different from a conventional one. However, finding someone who enjoys working with cargo bikes and also knows the bits and bobs of these bikes must be considered.

### Spare parts

Another aspect fundamental for maintenance is the ease of finding spare parts for the models you are considering. This is best addressed in the procurement phase.

### Agreements

You may want to create a partnership agreement for maintenance or take the bikes on consignment, as in a form of a lease if any of the pri-



vate businesses are willing to invest in this business opportunity.

## CoBiUM experience

In Gdynia, maintenance of the bikes was a challenge at first, because it took seven months of searching to find a service willing to do the work. Finally, a one-man company with mobile bike service experience was found. Now this is the only bike service in Gdynia dedicated to cargo bikes.

In other situations, for example, when a cargo bike is placed with a pre-school or a municipal department, it is important to have unambiguous agreements about who has responsibility for bike maintenance so as not to create an extra burden for the municipality.



Photo by the City of Gdynia.

## 5. PROMOTION OF CARGO BIKES

This chapter discusses how to go about explaining and promoting these bike systems. This work is not as linear as it may first sound. The process from raising awareness to full-scale adoption involves a number of interactions, first aimed at early adopters<sup>3</sup>. The final full-scale adoption phase is more likely to happen when early majority has been engaged. In any case, the structure below can help you identify which kind of initiative you need, based on your goals and target group.





Municipalities have different levels of bike culture established among their residents. For this reason, we suggest different starting points for introducing cargo bikes as a transport alternative.

Even if bike culture level is high in a given place, there may be sections of the population that would benefit from more initiatives that cater to a lower level.

The three main stages for promoting cargo bikes are:

- Creating visibility
- Increasing momentum (supporting the process of change)
- Full-scale adoption

## Creating visibility

This stage is about raising awareness by showing the possibility and viability of cargo bikes.

The most obvious and direct way is to hold meetings and involve key actors in inspirational events, where they can see good examples and the related benefits.

These meetings should have some models available for participants to try. They should be able to ride around the block just to get a feel for it. At the same time, there should be some local placement of bikes so they can be visible.



Photo by the City of Slupsk.

### Finding early adopters

Finding the right person – an early adopter – is an essential step to get things started. This is a person in an organization or a municipal department who is an enthusiast or has the entrepreneurial spirit so as to easily grasp the novelty and vision in an idea. The early adopter may not always be the head of the department, it can be a director of a pre-school, a park maintenance employee, or a business, like pizza delivery or cargo logistics.

Early adopters are important because they point out to a new way of doing things and they are a living proof within an organization so other employees can rest assured that cargo bikes are a viable solution without running the risk of a trial period. They also help to identify and correct the initial challenges that always occur. When the initiative is ready to expand, those challenges have already been addressed.

### Increase momentum

This stage is intended to create a momentum in which residents and different organizations have the opportunity to try out different bike models or test how a cargo bike can work in their day-to-day business.

- **Bike library** – Bike libraries take things one step further than bike testing by making cargo bikes available to the public for an extended period of time, so as to enable people to test a few models and see how they can fit in their lifestyle.
- **Local pilot programmes:** These programmes are subsidized tests that allow companies and organization to have a bike for an extended period of time, and are quite similar to a bike library. The difference is that their purpose is to recruit departments within a municipality or business that try out the bikes.
- **Involving policy makers** – This should elucidate the current infrastructure and other supporting elements required to firmly establish the use of cargo bikes in a given area. This is intended to create and kick-start the momentum for the infrastructure and policy requirements necessary to stimulate the use of alternative transport.

## Target groups

The target groups where the CoBiUM pilots had most impact were

- People without driving licence
- People with strong ecologic awareness
- People who try to avoid buying or wish to get rid of a second family car
- People who go travel by bike anyway and are used to this mode of transport.

## Full-scale adoption

Once the bike has visibility and momentum has been built, it is time to promote a full-scale adoption of the concepts as an alternative solution. These are supporting workshops for organizations that wish to design their use of cargo bikes, and these can be used to also design cargo bike logistics, explore savings etc.

This is also the moment for full-scale strategic planning and the introduction of other municipal/regional supporting structures to support the use of cargo bikes.

Stages	Creating visibility	Increasing momentum	Full-scale adoption
Initiative	Placement of bikes	Bike Libraries	Workshops
	Inspirational meetings	Policy and strategic planning engagement	Strategic planning
	Bike testing	Local pilot programs	Training the trainers



Photo by the press office at the City of Greifswald.



# Communication



There are three communication objectives that must be considered when promoting cargo bikes, and these depend on what you want to achieve and what impact on your target group you wish to create. For CoBiUM the strategy was:

## **To know – create visibility**

Creating awareness of cargo bikes and the lending schemes – to promote cargo bikes as a useful and better alternative for transportation, by reaching out via media, social media, events and printed material.

## **To think – Increase momentum**

Changing the attitude towards cargo bikes – by lending cargo bikes for a longer or shorter period to private users, municipal workers, or businesses/organizations.

## **To do – full-scale adoption**

Taking a step towards more sustainable transports and travel – thus leading to lower emissions, by the personal experience of lending and borrowing cargo bikes.

## Communication methods

There were two methods to promote the lending schemes:

- **Direct contact**, through email, phone, and personal meetings, or through internal municipal services, businesses and organizations.
- **Promotion campaigns**, through media, social media, events and printed material, directed to private users, for the bike lending schemes.

## **How to promote – direct contact**

- When finding early adopters and enthusiasts, use them as promotional examples.
- Involve end-users in the test phase rather than rolling out a top-down approach to implement cargo bikes. Both stages are important to include.

## CoBiUM example

People from Makerspace, an organization of arts and craft interested people in Greifswald, Germany, saw the advertising and cargo bikes from the bike library riding around the city. They contacted the CoBiUM team and asked to borrow a cargo bike for their work.

The Makerspace people did not want to use cars during summer, because the city is quite crowded, and the distances are short. During Covid-19 lockdown they made a lot of trips within the city to collect parts for printing visors and deliver them.

“Having a cargo-bike in our association helped members rethink the use of their car for short distances.”

For transporting small projects or rides to the hardware store for supplies, the bike works so well that the 27 members of the Makerspace are now thinking about instituting an online booking system and a key box for their bike to make the handover process more convenient for all its members.



Photo by the Makerspace in Greifswald.

## How to promote – promotion campaigns

When planning your campaign follow a basic communication plan:

- Objective – define in detail what you want to achieve
- Target group – make a detailed profile of typical members of your target group
- Choose channels
- Create key messages - adapted to the target group and channels chosen.
- Follow up on your campaign – what worked/did not work, did you get the desired effect?

### Example of a communication plan

**Objective** – 20 % of lenders will buy their own cargo bike.

**Target group personas** - Anna, 35 and Andres, 32, with two little children in a single-family house. She works as a shop clerk and he as a bus driver. They have two cars and commute 2 and 5 km to work each day. Both are interested in gardening and buying organic food as much as possible.

**Channels** - Anna follows influencers on Instagram and reads the local daily paper every day. Andres is active on Facebook and listens to the local radio station every day at work.

**Follow up** – Contact borrowers after a time to check whether they bought a cargo bike or not, why, and so on.

## Communication channels

Social media can be a good return on investment. It is a tool that is simple to use, and it can quickly reach a selected audience. A simple social media survey can cost 60 euros, one example within the project reached 204 people who responded and generated 53 likes and 286 followers.

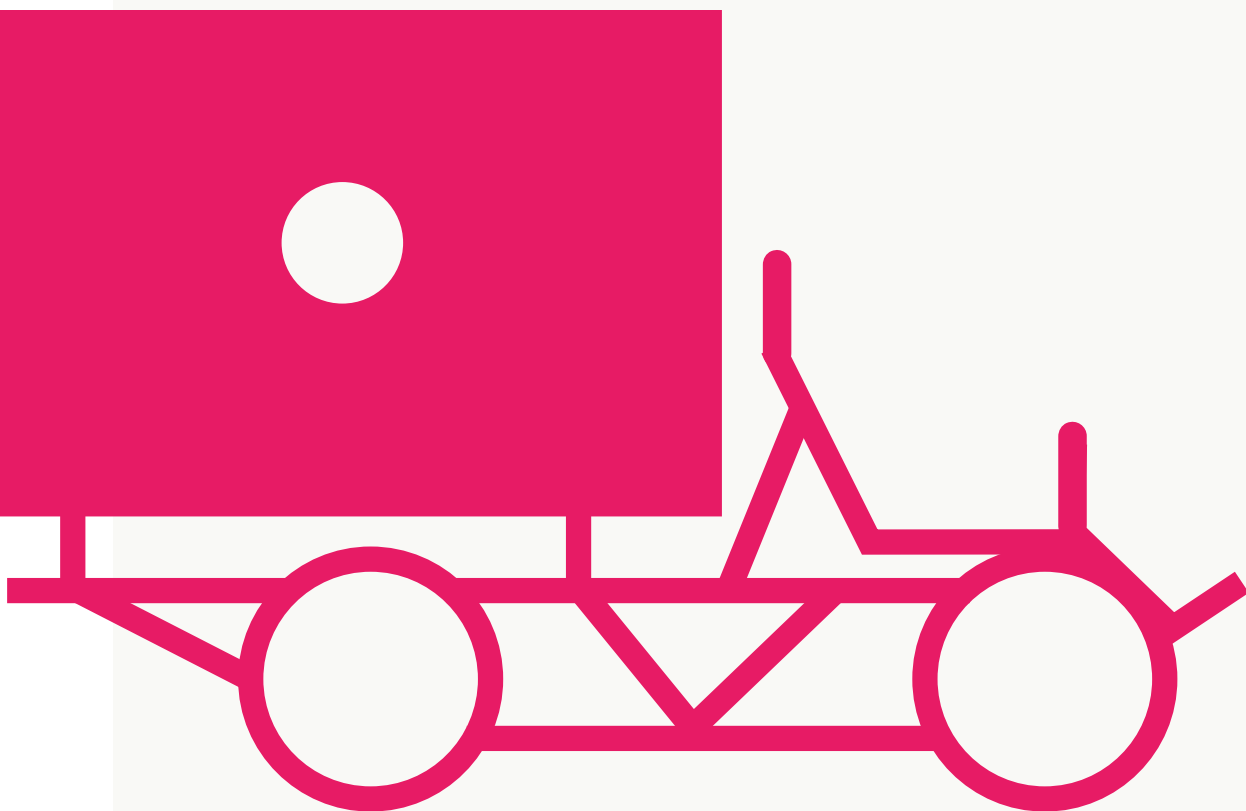
Social media advertising worked very well for the Växjö bike library. For the launch there were both ads in newspapers and social media, and the library time slots were booked for the whole season within less than a week. For next season they just used social media and got the same result.

The Danish pilot project in Bisserup harbour sent out a press release that resulted in three local newspaper articles, and two radio interviews (one in local radio and one in regional radio with more than 100 000 listeners). The press release consisted of a success story from users expressed from their perspective.

Other forms of promotion, such as banners and flyers, were used. However, it is not easy to evaluate the impact of these kind of devices. The communication templates for roll-downs, posters, flyers, postcard, and graphics for films are available for free use. [Download at cobium.eu](https://cobium.eu).



## 6. CHALLENGES AND SOLUTIONS





## Continuity of a bike library and test system

The implementation and communication about the bike library and municipal pre-schools bike programs worked really well. The challenge Växjö municipality faced concerned how to make the bike library a long term and self-sustaining activity.

The bike library set-up uses bike dealers as agents for lending, collecting, and servicing the cargo bikes. Within the framework of the project the funding was covered, so the service was free of charge to the public. For the post-project continuation of the bike library, the solution was to charge a small sum of around 30 € for each lending period (3 weeks). This covers servicing of the bikes and the booking system. The incentive for the bike dealers is the possible sale of a cargo bike to a lender after the lending period. The final model enabled the sum spent to serve as a credit if the user decided to buy a cargo bike.

Buy-lease arrangements need to have from a really good booking system from the beginning with development costs included in the price from the start.

## User fear, scepticism, and lack of interest

In different countries, potential users were anxious or sceptical, but after few test drives, they became happier and even enthusiastic. This speaks for the importance of having people test the bikes first. A bike pool or library is a good way to start.

The challenges encountered by Gdynia in trying to reach residents were their lack of interest in bikes, in general, and their fear of riding a cargo bike as this is still a little-known and even exotic product in Poland. Thus, the project focused on increasing awareness and explaining to audience what a cargo bike is and what it can be used for. The solution was to offer test rides at events, arrange training sessions to borrowers of the bike, and identify the one employee who was keen on riding a cargo bike and could introduce it to co-workers. This approach turned out to be very effective, as even city officials decided to take part in cargo bike tests.

Hands-on presentation with test rides available is very important and seems to be the most effective tool. Presentations at outdoor events were the most successful activities.



## End notes

- 1 <https://ourworldindata.org/co2-emissions#co2-emissions-by-region>
- 2 Sheth, M., Butrina, P., Goodchild, A. et al. Measuring delivery route cost trade-offs between electric-assist cargo bicycles and delivery trucks in dense urban areas. *Eur. Transp. Res. Rev.* 11, 11 (2019)
- 3 [https://en.wikipedia.org/wiki/Technology\\_adoption\\_life\\_cycle](https://en.wikipedia.org/wiki/Technology_adoption_life_cycle)



## 7. ABOUT COBIUM





# CARGO BIKES

## in urban mobility

### Background

Car-dependency in urban mobility is particularly prominent in the transportation of goods, children and equipment of small trade and repair businesses. With the bicycle experiencing a renaissance through electrification in European cities, there is a high potential for a modal shift to cargo bikes for personal and goods transport.

### Aim of the project

CoBiUM (Cargo bikes in urban mobility) aims at reducing the number of fossil-fuelled vehicles in urban mobility in the partner cities by promoting cargo bikes as transportation alternatives. Through pilot applications, communication, and campaigning CoBiUM wishes to contribute to improving public knowledge of cargo bikes and effectively increasing use among various target groups.

### Project participants

CoBiUM is a cross-border collaboration among the following eight partners from four countries who use their joint efforts to improve the quality and environmental sustainability of transport services in the South Baltic area:

- City of Växjö, Sweden
- Greifswald University, Germany
- City of Gdynia, Poland
- City of Slupsk, Poland
- Slagelse municipality, Denmark
- Guldborgsund municipality Denmark
- Danish Cycling Tourism Association, Denmark
- Energy Agency for Southeast Sweden



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