

### LUND UNIVERSITY

### **Sharing Cities**

### Exploring the Emerging Landscape of the Sharing Economy in Cities

Mccormick, Kes; Leire, Charlotte

2019

Document Version: Publisher's PDF, also known as Version of record

#### Link to publication

Citation for published version (APA): Mccormick, K., & Leire, C. (Eds.) (2019). Sharing Cities: Exploring the Emerging Landscape of the Sharing Economy in Cities. Lund University.

*Total number of authors:* 2

#### General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights. • Users may download and print one copy of any publication from the public portal for the purpose of private study

- or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
   You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

**PO Box 117** 221 00 Lund +46 46-222 00 00

### Sharing Cities Sweden

## **SHARING CITIES**

EXPLORING THE EMERGING LANDSCAPE OF THE SHARING ECONOMY IN CITIES











### Sharing Cities Sweden aims to put Sweden on the map as a country that actively and critically works with the sharing economy in cities.

The objectives of the program are to develop world-leading test-beds for the sharing economy in Stockholm, Gothenburg, Malmö and Umeå as well as develop a national node to significantly improve national and international cooperation and promote an exchange of experience on sharing cities.



Editors: Kes McCormick and Charlotte Leire

**Contributors:** Olle Bergman, Tove Lund, Oscar Pelin, Charlie Gullström, Philip Näslund and Yuliya Voytenko Palgan

Designer: Mia Pantzar

### **TABLE OF CONTENTS**

INTRODUCING 01 **THE SHARING ECONOMY IN** CITIES

02

**TEST-BEDS FOR THE SHARING ECONOMY** 



**DESIGNING TEST-BEDS AS URBAN** LIVING LABS



MALMÖ 10 STORY

GOTHENBURG 14 **STORY** 

**STOCKHOLM** 18 **STORY** 

UMEÅ 22 **STORY** 



**STRATEGIC THINKING ON THE SHARING ECONOMY** 

**LEARNING MORE** 27 **ABOUT SHARING** CITIES

"The future of humanity is urban, and the nature of urban space enables, and necessitates, sharing of resources, goods and services, and experiences."

Sharing Cities: A Case for Truly Smart and Sustainable Cities (2015)

"To meet challenges, communities, organizations, and local governments are increasingly turning to a basic human practice: sharing."

Sharing Cities: Activating the Urban Commons (2015)

### INTRODUCING THE SHARING ECONOMY IN CITIES

The sharing economy offers innovative solutions for sharing, renting and replacing under-utilized assets, often using digital platforms, visualization technology and ICT that informs about supply and demand.

Sharing Cities Sweden is developing world-leading test-beds for the sharing economy in Stockholm, Gothenburg, Malmö and Umeå. Through test-beds, sharing services and digital solutions are being developed. The opportunities and risks of the sharing economy are being tested and evaluated.

Sharing Cities Sweden is establishing a national node to significantly improve national and international cooperation and promote an exchange of experience on sharing services. The test-beds are being supported by the national node for coordination, national learning and international exchange.

### www.sharingcities.se

Sharing Cities Sweden brings together partners from business, the public sector, academia and civil society. The concept of sharing cities connects ICT, people and cities in fundamentally new ways that are challenging the design of systems of consumption and production. It is particularly important that the sharing economy contributes strongly to sustainable development.

The sharing services being developed in the test-beds relate to 1) utilization of spaces (premises, housing, green infrastructure, shared public space etc.) and 2) utilization of goods and services (tools, clothing, toys, handicrafts, etc.). Transport and mobility are included to a certain extent.

Sharing services should contribute to reduced energy and climate impact and sustainable development, but also promote social innovation and sustainability in the city. Sharing services should also be innovative and contribute to a wide range of different types of services within the economy.



# UMEA

With 125,000 inhabitants, **Umeå** is a fastgrowing city in the northern part of Sweden. This growth must be done in a sustainable way with regards to environmental, social, cultural and economic aspects. The Umeå test-bed is focusing on innovative solutions when it comes to mobility, green spaces, resource efficiency, use of indoor space and consumption. The key question for Umeå is to understand the different roles the municipality should take to support, enable and deliver sharing services in the city. Another question is to understand how different sharing solutions is contributing to Umeå's sustainability goals.



Södra Älvstranden is a special focus area for the testbed in Gothenburg. It is a development project with sustainability and the sharing economy as core aspects in its vision and overall plans.

### TEST-BEDS FOR THE SHARING ECONOMY

Campusparken is a special focus area for the test-bed in Umeå. The aim is to facilitate and increase sharing o space, parks and infrastucture in the context of a small but growing city.

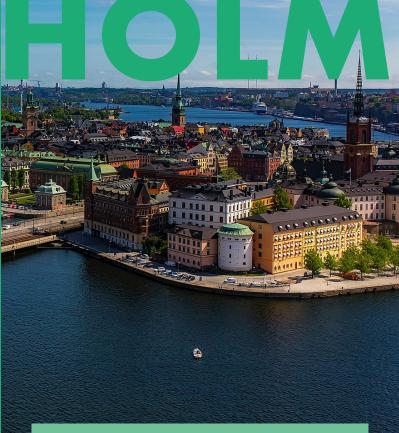
The Gothenburg test-bed views innovation as something new that creates value and that can be spread across the city. An idea does not become an innovation until it is realized. spread and gives benefits. In order to strengthen Gothenburg's innovative capacity on the sharing economy, a strong focus is placed on combining knowledge, cultures and experiences. A key focus in the test-bed is partnerships with a wide range of actors. The testbed enables a stimulating environment allowing for more successful meetings between actors. Participants are encouraged to challenge each other, reshape their thinking about sharing cities, and make changes that would not happen otherwise.

STOCK HOLM

The uniqueness of the **Stockholm** test-bed is based on the cooperation with a citizenship initiative called ElectriCITY, now an economic association, which operates a number of local climate change initiatives in the district of Hammarby Sjöstad. This area was originally planned as an eco-district and it has received international attention for its ambitious goals and activities. While the city of Stockholm at large has set its climate targets by 2040, ElectriCITY has set its targets for 2030. This has been the starting point for the working methods in Hammarby Sjöstad, which includes negotiated simulation with residents and stakeholders in workshops and the application of future-oriented scenarios.



Sege Park is a special focus area for the test-bed in Malmö. It is a significant development project integrating sharing economy principles into the design of infrastructure and housing.



Hammarby Sjöstad is the special focus area for the test-bed in Stockholm. It is a development project with ambitious visions and goals for sustainable buildings, transport, and lifestyles.

ALMO

A new neighborhood in Malmö is emerging in Sege Park, an area with a rich history and exciting future. The existing parks and buildings provide the conditions for a good living environment. Sustainability, the sharing economy and urban agriculture are some key words for the building actors who are developing some 700 homes in Sege Park together with the municipality. The innovative aspect of the Malmö test-bed is the integration of principles for the sharing economy into the physical development of Sege Park. The testbed has come to be a setting where actors openly discuss and negotiate with each other about how to create a sustainable and sharing city district.

### **DESIGNING TEST-BEDS AS URBAN LIVING LABS**

In 2018, Swedish test-beds was launched – an online portal for test-beds in Sweden. It states that a test-bed is a "physical or virtual environment in which companies, academia and other organisations can collaborate in the development, testing and introduction of new products, services, processes or organisational solutions in selected areas". It is important that test-beds be open to users outside the organisations involved and be available for use for by a variety of different actors. Three types of test-beds are described by Swedish test-beds. These include:

- Laboratory environment: Examples of such environments are specialized labs at research institutes, universities and private companies. They are characterized by focusing on tests of single functions, and not on tests of full systems in real life conditions.
- **Simulated environment:** One example within this category is separated test tracks for winter driving. A common feature is that the test-bed enables tests on a system, process and product level and that the test environment offers or simulates life like conditions.
- **Real environment:** Examples from this category are tests of new waste management systems in housing areas, trying new organic goods in existing production processes, tests of different ecosystem services or transport solutions in specific city districts.

Sharing Cities Sweden has established four test-beds in the cities of Stockholm, Umeå, Göteborg and Malmö. These test-beds are taking the form of urban living labs that are embedded in the real environment. Test-beds in the real environment are quite different to test-beds as a laboratory environment or simulated environment. Sharing Cities Sweden argues that the test-beds in Stockholm, Umeå, Göteborg and Malmö are integrated into these cities and they have a fluid or dynamic character to their organization that allows significant interaction with users and different actors. "Sharing cites have a huge potential ... we can integrate all dimensions of sustainability: ecological, economic and social issues."

Oscar Pelin, Malmö Test-bed

"Cities are really about sharing and that is why we live in cites."

Charlie Gullström, Stockholm Test-bed

"Another aspect of developing sharing cites is to stimulate co-creation in cites."

Tove Lund, Gothenburg Test-bed

"Cites can play a major role in shaping the sharing economy and building social cohesion."

Philip Näslund, Umeå Test-bed







But what are urban living labs? They can be defined as sites devised to design, test and learn from social and technical innovation in real time and in real places. Urban living labs can as such be considered both as an arena (a geographically or institutionally defined space) as well as an approach for exploratory and experimental collaboration between researchers, citizens, companies and local authorities. The test-beds in Sharing Cities Sweden are designed in line with the key factors that make urban living labs unique. These include:

- **Context:** Urban living labs should be located in a well-defined geographical area. The test-beds in Sharing Cities Sweden are located in Stockholm, Umeå, Gothenburg and Malmö. The geographical area within each test-bed is further limited to certain areas and activities.
- Experimentation: Urban living labs should aim to design and test new solutions, technologies and policies in real environments and do so in a transparent manner. The test-beds in Sharing Cities Sweden are designing, implementing and testing sharing services.
- **Participation:** A key factor in urban living labs is that the development is based on collaboration with a diversity of stakeholders and users. The test-beds in Sharing Cities Sweden are based on continuous and interactive collaboration with both stakeholders and users.
- Leadership: Clear leadership and ownership are considered crucial for urban living labs. The test-beds in Sharing Cities Sweden are designed and managed by local authorities and universities and they are managed in cooperation with a variety of partners.
- **Evaluation:** Urban living labs should be evaluated in terms of their ability to formalize learning, drive forwards implementation and create impact. The test-beds in Sharing Cities Sweden are systematically working with evaluations of sharing services.





### **GOVERNING SHARING CITIES**

In the last decade we have observed an increasing number of people around the world staying in the homes of other people by using *Airbnb*, joining strangers for a ride with *Bla Bla Car* and renting city bikes to run errands or do sightseeing. Digital technology helps us connect with strangers and borrow their cars, tools, clothes, accessories and toys. It also helps us offer items we do not use often for others to use.



With increasing urbanization, cities face numerous sustainability challenges. The major ones include climate change, pollution, waste generation, resource use, social segregation, unemployment and poverty. To address these challenges many city governments work with a variety of promising concepts, one of which is the sharing economy.



"'Sharing', 'sharing economy', 'peer to peer economy' and 'collaborative consumption' are just some terms used to describe a variety of bottom-up initiatives, public-private-people partnerships, business start-ups and local government schemes, all of which utilise the idling capacity of our material world."

Yuliya Voytenko Palgan, Researcher and Collaborator in Sharing Cities Sweden Municipalities play an important role in shaping the landscape of the sharing economy in cities. They often define the conditions for success or failure of urban sharing organisations. But how do city governments engage with the sharing economy? Which governance mechanisms do they employ and which roles do they play?

Based on research in the cities of Amsterdam, Berlin, Gothenburg, London, Malmö and San Francisco, it is possible to define five principal mechanisms in which municipalities govern the sharing economy. These include regulating, self-governing, providing, enabling and collaborating. Each of these mechanisms includes several governance roles through which municipalities engage with and shape the sharing economy.













### Regulating

Municipalities can use regulatory tools such as laws, taxes, bans and policies to govern the establishment and operation of urban sharing organisations. In this way, municipalities may both constrain the sharing economy to emerge or spread, or support certain types of urban sharing organisations.



### Self-governing

The mechanisms of self-governing by municipalities refer to organisational management when municipalities adopt urban sharing practices in their own operations. For example, this can be through procurement practices or when different municipal units engage in sharing activities with each other.



#### Providing

This role is exercised through the provision or withdrawal of practical, material and infrastructural means. Municipalities may offer financial or infrastructural support to urban sharing organisations. However, they can also choose to intentionally or unintentionally ignore urban sharing organisations and not grant any financial resources or support.













#### Enabling

The key enabling mechanisms that can be used by municipalities are persuasion, argument and incentives. Municipalities may facilitate collaboration among urban sharing organisations, provide information about sharing and offer training on the topic. They may organise competitions and offer voluntary certification schemes to recognise the best sharing practices in their city.



### Collaborating

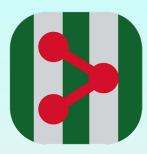
Municipalities may also enter into partnerships with urban sharing organisations and other stakeholders. Often municipalities become a partner for strategic reasons. For example, when municipalities want to directly address urban sustainability challenges through engagement with the sharing community.



#### Reflection

Municipalities are shaping the landscape of the sharing economy in cities. Research on the cities of Amsterdam, Berlin, Gothenburg, London, Malmö and San Francisco show five main mechanisms that municipalities are using in different ways. These include regulating, self-governing, providing, enabling and collaborating.





### THE MALMÖ STORY

SHARING CITY MALMÖ – CONNECTING THE SHARING ECONOMY TO URBAN PLANNING PROCESSES

# The municipality and the builders are thinking visually together

For the City of Malmö, the test-bed in Sege Park is under development to become an international flagship within the sharing economy. The municipality is cooperating with all the actors who invest in the area, including the builders, to develop new forms of housing and business models.

- "What characterizes Malmö's test-bed within Sharing Cities Sweden is that the sharing economy is integrated into the physical development of the city", says Oscar Pelin, test-bed coordinator for Sharing City Malmö. "Sharing is integrated as part of both the planning and development process for the Sege Park area."

How do we structure the sharing economy structurally into the properties being built? How do we shift functions from private homes - laundry, workshop, meeting areas - and make them public or semi-public so that they can be shared with more people? These are some of the issues that the city planners from Malmö Municipality together with the local builders are exploring together.

- "We are also exploring whether sharing can be a tool for living within planetary boundaries while keeping within reasonable monetary limits", says Oscar Pelin. "If you build in an environmentally friendly way it is often rather expensive! But we are exploring if sharing can be a tool that allows for new construction of high standards from both a quality and natural resource point of view and if it can also be made cost-effective for residents. If people cannot afford to live sustainably, then how can you call it sustainable?"

Since his studies at Lund University, where he studied applied climate strategy, Oscar Pelin has gained practical insight into how both the private construction industry and municipalities think and work. For the past five years, he has been fully involved in Malmö's operations and development from a sustainability perspective. - "I have worked with many different types of projects. To a large extent, it has been about ensuring that external investments around the city are made with consideration to the citizens of Malmö as well as to the planet. For example, I have worked on projects that dealt with renovation and new construction in the renovation of the larger residential areas that were constructed in the 1960s in Sweden".

In a city where 45 percent of the population is defined as having a "foreign background", it is natural that integration issues are high on the agenda. The sharing economy can help in many ways. One example is that a better range of shared spaces and functions in homes makes it cheaper to live, mainly because a family can live comfortably in a smaller space. Another example is that the sharing economy creates jobs.

- "We have a structural production of waste in society today. Our cars are idle 90 percent of the time. Many people, especially those who live in villas, often have more space at home than they need. Over 30 percent of the food we eat is wasted. All of this creates room for entrepreneurship that can provide job opportunities in the future."

One of the exploratory companies with which Malmö Municipality cooperates is Godsinlösen from Staffanstorp. They are a good example of a company that finds and creates new opportunities in a circular economy. In collaboration with several of the country's major insurance companies, Godsinlösen saves useful resources from becoming waste, including damaged mobiles and computers.

### **3 TIPS**

Oscar shares three tips to cities that want to stimulate a sharing economy.

### 1. Don't assume that everything with the sharing economy is positive

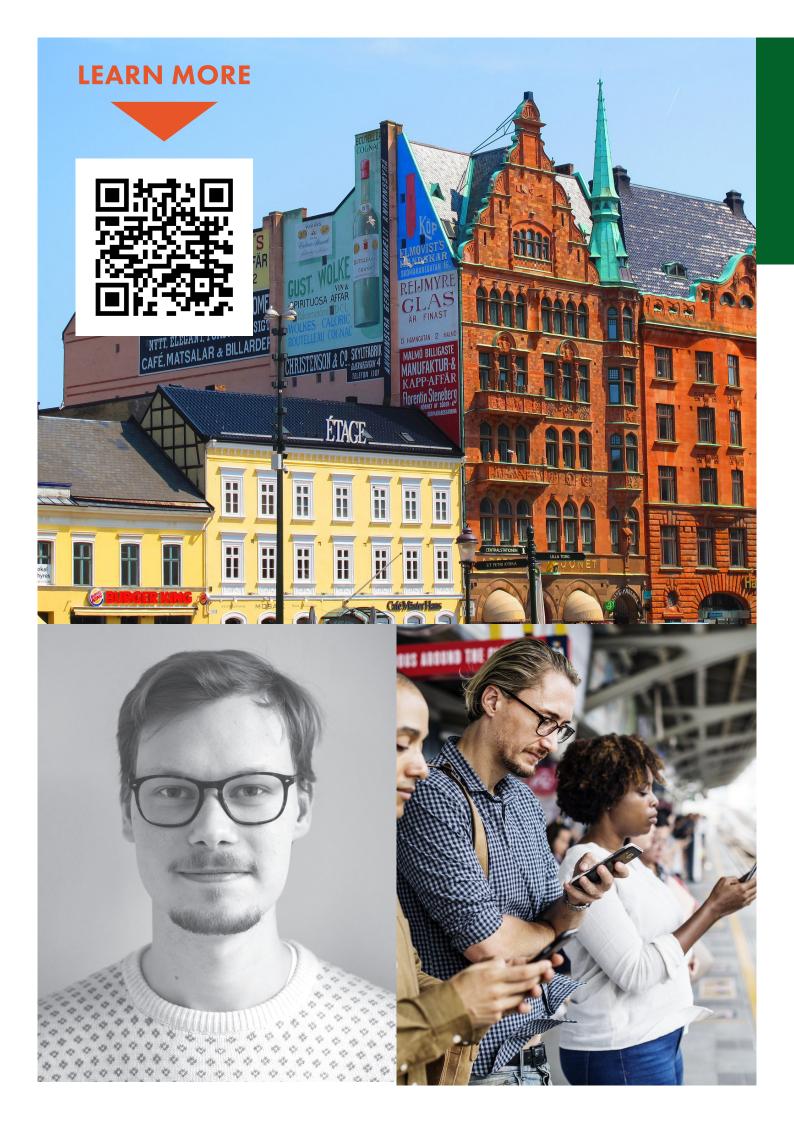
Realize that there can be negative impacts from some sharing economy initiatives (for example, the problems in the wake of the successes of AirBnB and Uber). Rather, observe the precautionary principle and evaluate the results from your efforts.

### 2. Ask yourself why you are engaging in sharing

What political goals do you want to fulfill? The sharing economy is a tool - it has no intrinsic value.

### 3. Dare to experiment - but do it together

Ownership of the projects should not lie with one player. It is important to constantly define what the municipality can do in each collaboration.





- "They bring in the broken units, repair them and sell them at a lower price compared to new ones. Now they are expanding their business model. They have earned somewhat of an umbrella function for different sharing activities in Skåne."

The development project Sege Park is important for the test-bed Sharing City Malmö. Here a new neighborhood grows around what was previously the Östra Hospital in Kirseberg.

- "Together with the builders, we are creating the conditions for the sharing economy. It is not just about passive contexts but also about active services partly of simpler types such as tailors, and partly more complex types for example laundry shops. So far, the conceptualization work has resulted in some seventy different sharing functions."

Sharing Service Hubs are an example of a novel approach by re-designing parking houses for more purposes than only parking cars. Located in the outskirts of a city these multipurpose-houses can lead to a reduced need for drive cars into town and at the same time they can act as a way to facilitate sharing services.



13

Oscar Pelin believes he has succeeded in creating a "fun, co-operative process" in the work of the thirteen builders who are involved in Sege Park. Many of the initiatives and benefits for the participants have been difficult to predict from the beginning. Among other things, the companies have started to cooperate on purchasing and investments. Some of the companies have really been inspired by the project and the possibilities of the sharing economy

- "We wanted some form of car pool solution, but thought it was too expensive to hand it out to an industry giant. Then one of the builders took on building an electric car pool fleet - they saw it as a way to broaden their business concept for the area." SHARING CITY GOTHENBURG - GETTING AN OVERVIEW WITH THE SMART MAP

### The city is facilitating a diversity of civil society initiatives

### THE GÖTEBORG STORY

The test-bed Sharing City Gothenburg is coordinated and strongly supported by the City of Gothenburg. The cooperation with local initiatives is constantly expanding, and with the use of a digital platform, the city has literally put the growing sharing economy on the map.

- "Trust is a currency in the sharing economy which is one of the reasons that the City of Gothenburg engages so much in this aspect", says Tove Lund, testbed coordinator for Sharing City Gothenburg. Initially, the sharing economy was mainly linked to sustainability from an environmental and resource perspective. But gradually we in Gothenburg have come to realize that one of the most obvious effects from the sharing economy may be related to social sustainability, and more specifically trust between people. Positive social effects should not be underestimated in a city like Gothenburg which is one of the most segregated in Sweden.

Tove Lund has always been interested in social issues. Since graduating in political science at Lund University, she has gained considerable experience with public administration, not least when it comes to sustainability issues.

- "Today I am part of a team focusing on making it easier for Gothenburg citizens to live more sustainably."

Early on, the City of Gothenburg set goals to reduce the environmental impact of consumption. This means not only to reduce emissions from their own operations, but also to inspire and engage citizens to make an effort.



**Sharing Sustainability Indicators** offer an approach to understand the impact and added value of sharing services. There is a need to measure and formulate how sharing services contribute to sustainable development. Lifecycle data can be useful to indicate environmental or climate benefits. The data, in turn, can also provide foundations for scaling up of initiatives.

The sharing economy was something that everyone started talking about 2012. Just as in many other cities, the first initiatives in Gothenburg came from civil society. An early example was the Bicycle Kitchen - a grassroots movement of do-it-yourself workshops where people can repair their bike. Also property owners contributed by donating abandoned bicycles which could then be repaired. At the same time stores with products for free and clothes to lend as well as car pools started to emerge.

"Since I am driven by the sustainability concept, I realized that here we have a possible piece of the puzzle that can help reduce emissions by sharing products, premises and surfaces in a smart way".

Around this time, one of the most important actors in the test-bed was also established: the association called Kollaborativ Ekonomi Göteborg (KEG). Today they have a close cooperation with the City of Gothenburg on relevant issues.

"Together we began to map out all the activities that are taking place, which resulted in something that we today call the Smart Map," says Tove Lund. We have continued to develop it and over time it has become a natural platform for the sharing economy in Gothenburg. Here you can get a quick answer on for example where the closest bike shop is located.

### LEARN MORE





15

It is clear that the sharing economy requires major behavioral changes among residents and consumers. In 2017, the municipality made a large market survey to explore the attitudes of the people of Gothenburg. What is the interest in participating in the sharing economy? What are motives for engaging in sharing? What are common barriers?

- "An obvious reason for many is to save money", says Tove Lund. "But we also saw that there was a strong sustainability perspective - that many do not think it is not reasonable that we consume so much. Here you see a difference between older and younger generations. In fact, among younger people it may be the status of not owning anything. You own your style, so you don't have to own the things."



Something that Tove Lund appreciates in her role as a test-bed coordinator is that there is political support for the sharing economy. Already in 2015, Gothenburg City's overall governing document wrote that the city should facilitate the growth of the sharing economy. In a segregated city such as Gothenburg, the sharing economy also gives people the opportunity to meet and develop confidence in social groups that are not normally taking part in joint activities.

- "We try to drive the concept a sharing city from an environmental sustainability perspective, but it is also at least as much about social sustainability - democracy, civic dialogue and how we invite the citizens to co-create their city."

A sharing economy can also provide a more vibrant and safer city in that citizen associations and small businesses can move into premises located close to residential buildings.

- "We know that residents feel more secure in an area when there is life and movement throughout the day. This is therefore an important aspect also for the property owners."

To achieve this, one of the ideas to be tried out in the test-bed is a flexible rental model. The work is linked to the project Masthuggskajen, an area on the southern side of the Göta river in Gothenburg. Here about 1,200 homes and 5,000 - 6,000 workplaces will be shaped in the coming years.

- "It is a golden opportunity to make the initial development plans include the sharing economy as a dimension. For this area there is also a consortium of real estate companies, which has adopted a sustainability program to clarify that all partners should facilitate sustainable lifestyles and that the circular and sharing economy are key components. The real estate companies are working on a strategy to create a plan for lively streets in the area and it should also be possible to accommodate sharing initiatives that are not necessarily commercial, for example bicycle kitchens and toy libraries."





### **3 TIPS**

Tove shares three tips to cities that want to stimulate a sharing economy.

### 1. Map out what is available in the city

Feel free to use our platform. It gives a good overview of which initiatives are available and which ones could be missing in the city.

### 2. Be the facilitator and not the doer

Help create trust and meeting points.

### 3. Include the sharing economy in city planning

If we are to scale up the sharing economy we have to bring larger actors onboard. For this it is crucial to participate and discuss from the beginning. Right now, for example, many cities try to reduce the number of parking spots – and this is where bicycle and car pools can get a key role.

SHARING CITY STOCKHOLM – USING VIRTUAL ROOMS AS A TOOL TO STRENGTHEN SOCIAL SUSTAINABILITY AND ACCELERATE CLIMATE CHANGE ACTION

# The most "climate-smart" neighbourhood in Sweden

The test-bed Sharing City Stockholm focuses on Hammarby Sjöstad where some 30 projects on sharing, sustainability and digitization are run in parallel. With the help of for example virtual technology, opportunities are created for closer collaboration on sharing in the residential areas.

Charlie Gullström – architect, researcher and project manager for Sharing City Stockholm – uses a telling quote: "Our research is about bringing people together. We explore how virtual rooms can be integrated with physical rooms and buildings. We want to make it really easy for people to move between two worlds, almost as if there were no boundaries. I think everyone should have a virtual office to supplement their physical work environment."



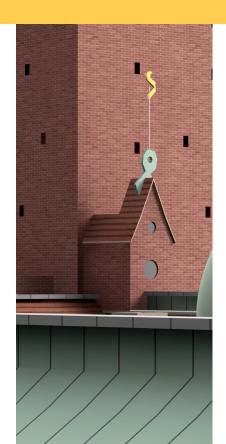


### **THE STOCKHOLM STORY**

The test-bed itself is focused on Hammarby Sjöstad, which is represented by the organization ElectriCITY. Other project partners are Stockholm City, Research Institute of Sweden and the companies Ericsson, Evothings, Metasolutions and Skanska.

- "The difference with the other test-beds in Sharing Cities Sweden is that this is not primarily driven by the municipality, but rather from a citizen initiative", Charlie Gullström explains. "With our project we help to support a local climate target."

ElectriCITY is run as an economic association. The organization was founded in 2012 and aims to make Hammarby Sjöstad the most climate-smart neighborhood in Sweden. For the current 30 projects and collaborations, a coherent concept called Hammarby Sjöstad 2.0 has been created.



### **3 TIPS**

Charlie shares three tips to cities that want to stimulate a sharing economy.

### 1. Promote cooperation between citizens and local actors

Use sharing and digitalization to leverage cooperation between citizens and local actors to encourage a discussion on open data and to make platforms available so that the "digital twin" of the city becomes a safe, public and open place for everyone to exchange data as well as experiences.

### 2. Experiment with local initiatives

Create small pilots and living labs where startups are linked to local initiatives for a circular and sharing economy, such as urban cultivation, food waste or social innovation, by putting pressure on the suppliers to test new services.

### 3. Join Viable Cities

Become a member of Viable Cities, a strategic innovation program whose task is to support cities in their climate change work - based on digitization and citizen engagement to facilitate the work!

- "We are building an interactive neighborhood platform with the purpose, among other things, to help residents make climate-smart choices."

Some examples might be to inform about the air quality in the neighborhood, facilitating lending out things, initiating joint purchases and coordinating transports.

- "Feedback to users is not uncommon in residential buildings today, which are all to some extent "intelligent". But buildings become really "smart" only if those who use the house are in the loop. Returning information directly to the residents about how shared resources and premises are used is therefore a key factor in our project."

Many people seem to think being resource-efficient, sorting waste or sharing instead of owning a car does not make any real change.

- "But we believe that better visualizing how individual measures have an impact on society as a whole can make a difference. For example, based on local sensor data in the neighborhood, we can show the concrete impacts for the district."

The project group provides a framework for an open digital infrastructure that supports scalability. This creates a non-proprietary platform that gives

the residents access to the data they generate on common premises. To this platform, both commercial and non-commercial sharing initiatives can be linked. Charlie Gullström compares the process of how a traditional library is designed to give citizens access to books. Today we need to complement the physical infrastructure with digital support - and that in a way allows us to continue to borrow both from each other and from other actors.

"Look at how modern libraries today develop into meeting places for sharing
this applies to knowledge as well as tools and services that are delivered by different actors."

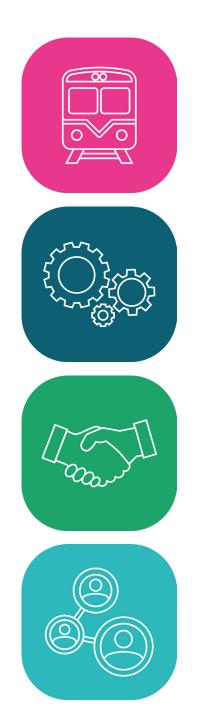
Twenty years ago, Hammarby Sjöstad was a predominantly environmental project in which Stockholm City, construction companies and architects worked together for sustainable development. A lot of innovative approaches were taken, for example in terms of so-called "bokaler", meaning premises for small businesses and associations on the street level.

### **LEARN MORE**









**Sharing Future Scenarios** is all about visioning and evaluation methodologies for pilot projects. Exploring the possible futures for the sharing economy in cities requires bringing together a diversity of stakeholders to discuss and debate the opportunities and impacts of sharing services. Pilot projects can also help to experiment with possible futures.

- "An architect who was instrumental in this was Mats Egelius who had foresight and one thing he did was planned agricultural lots in a residential neighborhood, far ahead of the urban agriculture wave that we now see in cities around the world. Hammarby Sjöstad also has a lot of parks and public space."

Something that the project group in Sharing City Stockholm is exploring together with ElectriCITY is the social community: how to maintain and develop trust between neighbors? Shared virtual rooms are not only a logistical and practical tool for the sharing economy, but also something that can change attitudes. Just like a physical laundry room or meeting room or local park, a virtual environment can become an arena for interaction that brings us closer.

- "Right now we are studying seven streets and working directly with those who live there. We have been conducting baseline surveys for about a year now to get a picture of how and why they thrive in this area."



21

SHARING CITY UMEÅ – CONTRIBUTING TO SUSTAINABLE GROWTH AND INCLUSIVITY

# The nudging principle "it should be easy to do the right thing"

Umeå Municipality is planning for a growing city and emphasizes the importance of growing in a sustainable way. It is important to be inclusive and build trust among all involved stakeholders, irrespective of whether you have been living in Umeå for a long time, a fresh student or a newly arrived citizen. The test-bed Sharing City Umeå would like to be supportive in this way and as such the sharing economy has come to play an important role in the urban development there.

- "An issue that occupies us is how we stimulate the right type of citizen behavior in the urban planning process", says Philip Näslund, project manager in Sharing City Umeå. "We apply nudging principles where it should be easy to do the right thing. For us, it is about understanding what role the city should have and how we can create the best conditions for a sustainable city."

### THE UMEÅ STORY

**Sharing Made Simple** is based on the fundamental idea that sharing needs to be easy. It is difficult to change the way consumers and users act and therefore overall consumption patterns. Accessing sharing services needs to be attractive and easy to understand the benefits. Sharing needs to be integrated into lifestyles and communities.

Tomtebo Strand is an example of one of the new areas on the rise. Today, the area is undeveloped, but in a few years an expected 10,000 people will have their home and workplace there. Here hubs for sharing services are planned, for example for local transport. In a modern city, garages and parking can be replaced by service hubs for car pools, bikes, deliveries and other things that make it easier to live sustainably.

- "In the municipality, we must first learn what drives certain behaviors for citizens. What are the real needs? Why do you have to travel at all?"

Philip Näslund studied environmental science at Linköping University. Prior to joining Umeå, he worked in the county council for many years and there he was primarily engaged with environmental management.

- "In my job, it is important to be in the forefront. I like to test things and try new ones so it suits me well to have a job where you have to be curious."

Umeå is a fast-growing city: it is estimated that today's 126,000 inhabitants will reach 200,000 in about three decades. For this expansion, there is a clear political challenge to grow in a sustainable way - economically, ecologically, socially but also culturally.

23

- "We work according to circular principles as regards to environmental issues, and for the social and cultural bit we focus on raising confidence among the citizens of the city. There are newly arrived citizens, and there will be more students - we want to include them in the community."

An interesting player in the collaboration is the company Coompanion, a business advisor for social entrepreneurs. They help individuals from different social groups to get started with their projects. One day these are students at the university, another day they are newly arrived citizens.

As in many other cities, integration work is one of the main points on the agenda and Umeå also incorporates gender equality aspects. Philip Näslund emphasizes that it is important here to take into account the social dimension of the sharing economy. Around these issues, the test-bed collaborates with the integration department, Viva integration, in Umeå municipality. Among other things, they run a project on sharing services and integration.

- "We did an analysis of how it looks when a person arrives in Umeå. What do you need, and what knowledge can you contribute? It can be about accessing everything from mobility services, tools and sports equipment to social networks. At the same time, you bring your own knowledge and skills with which you can build a business."







### **3 TIPS**

Philip shares three tips to cities that want to stimulate a sharing economy.

### **1. Define the goals**

What is it really you want to achieve? Try to sort out what the city wants and what it can help to achieve using its current structures. Make sure you get the local politicians onboard.

### 2. Agree on an action plan

Do not delay the process of designing and implementing a concrete action plan.

### 3. Engage in concrete projects

In Umeå, we have been involved in for example an electric bicycle pool, which has been a great success. Make connections to all possible actors such as power companies, parking companies, waste companies and not least the private and knowledge-based sector.

> In March 2019, the test-bed Sharing City Umeå organized a conference with the title Cooperative Cities - the Nordic region's first conference on the theme "the city as a jointly owned sharing platform". The purpose was to "explore jointly owned, cooperative digital platforms with a focus on sustainability in all dimensions". Among the speakers were representatives of Swedish cities and various types of cooperative platforms.

> - "Through the conference we created a new meeting place and knowledge of the digital infrastructure that is crucial for promoting sustainable lifestyles", says Philip Näslund.

> In the work with the sharing economy, there is only one way for the actors to find their role in relation to the environment and partners: to get involved.

- "We operate in different sectors and we have different roles - we at the municipality facilitate services, and others run them. Umeå Municipality gets many benefits from acting as a test-bed for the sharing economy within the program Sharing Cities Sweden. We get the chance to develop new knowledge about the municipality's different roles and how we can best promote a circular and sharing city where everyone is involved and contributes to sustainable development. In this way, one can say that the first challenge is to put into words on what one does."



### STRATEGIC THINKING ON SHARING CITIES

Sharing Cities Sweden is developing strategic projects to investigate the emerging sharing economy in cities in Sweden and support the activities of the test-beds and national node. The strategic projects cover the topics of digital platforms, business models, small towns, behavioural economics and social drivers.

### LEARN MORE







### **SHARING TOWNS**

Developing and supporting the sharing economy in small cities and towns in Sweden.

SHARING BUSINESS MODELS Conducting an international investigation of novel

business models for the sharing economy in cities.





**SHARING DIGITAL PLATFORMS** Creating and testing user-centred digital sharing platforms tailored for Sweden.

### SHARING BEHAVIOUR

Developing behavioural economics experiments focusing on the sharing economy in cities.





### SHARING COMMUNITIES

Investigating the social drivers and potential for the sharing economy in communities and cities in Sweden.



### LEARNING MORE ABOUT SHARING CITIES

Want to learn more? Check out the Massive Open Online Course (MOOC) on sharing cities developed and organized by Sharing Cities Sweden. The MOOC is available for free and contains a collection of diverse short films and key short readings on sharing cities as well as interactive forums and a practical assignment to create an online learning community. It provides a diversity of key examples of the emerging sharing economy in cities.





Sharing Cities Sweden is carried out within Viable Cities, a Swedish strategic innovation program for smart and sustainable cities, which is jointly funded by VINNOVA, the Swedish Energy Agency and FORMAS.

The lead partners for Sharing Cities Sweden include Lund University, KTH, City of Malmö, City of Umeå, and City of Göteborg.

STRATEGIC

INNOVATION



Viable Cities is a Swedish strategic innovation program for smart and sustainable cities. Sharing Cities Sweden is a program of Viable Cities. Viable Cities brings together around 50 stakeholders in research, industry, government, local authorities and civil society. The vision for Viable Cities is that Sweden inspires and takes a leading role in energy and climate transitions through smart sustainable cites.

































Sharing Cities Sweden aims to put Sweden on the map as a country that actively and critically works with the sharing economy in cities

www.sharingcities.se