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Sharing Cities Sweden: Key Findings and Amplifying Impacts



Sharing
Cities
Sweden



Viable
Cities

Med stöd från

VINNOVA
Sveriges innovationsmyndighet

 **Energimyndigheten**

FORMAS 

Strategiska
innovations-
program

Title: Sharing Cities Sweden: Key Findings and Amplifying Impacts

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**Sharing
Cities
Sweden**



**Viable
Cities**

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VINNOVA
Sveriges innovationsmyndighet

 **Energimyndigheten**

FORMAS 

**Strategiska
innovations-
program**

01. Summary - Read about the key insights and findings from Sharing Cities Sweden

07. Sharing Stories – Five chapters that provide valuable insights into how cities are innovating in the field of the sharing economy

02. Sharing Catalogue - Explore over 50 outputs from the test-beds in Malmö, Gothenburg, Umeå and Stockholm

08. Sharing Maps – A digital platform and guide to the local sharing economy in cities to facilitate the shift from ownership to access

03. Sharing Futures - Twelve insights on opportunities and ways forwards for unlocking new opportunities and solving urban challenges through the sharing economy

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05. Sharing Labs – Five principles behind the design of test-beds as urban living labs for exploring the sharing economy in cities

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06. Sharing Developments – Four significant development projects in the test-beds in Malmö, Gothenburg, Umeå and Stockholm

12. Sharing Courses – A Massive Open Online Course on the sharing economy, governance, innovation and urban sustainability

01. Summary

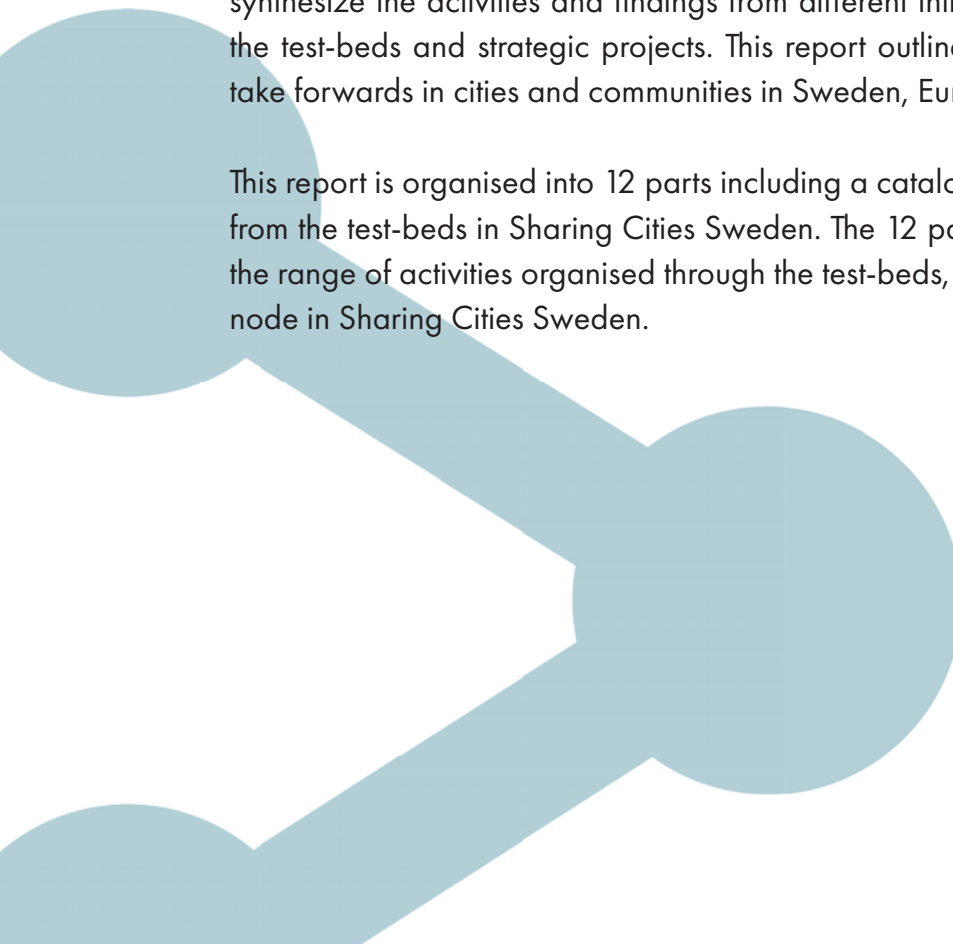
Sharing Cities Sweden was a national program to help establish Sweden as a country that actively and critically works with the sharing economy in cities. Between 2017-2021, it was a key initiative of Viable Cities - the strategic innovation program for smart and sustainable cities in Sweden.

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 established world-leading test-beds for the sharing economy in Stockholm, Gothenburg, Malmö and Umeå.

Through the test-beds, sharing services and digital solutions were developed, tested and evaluated. Sharing Cities Sweden also established a national node to coordinate activities and facilitate collaboration. The national node launched strategic projects to investigate key aspects of the sharing economy in cities.

Sharing Cities Sweden developed and published a diversity of reports and outputs that synthesize the activities and findings from different initiatives in the overall program, the test-beds and strategic projects. This report outlines key findings and lessons to take forwards in cities and communities in Sweden, Europe and around the world.

This report is organised into 12 parts including a catalogue of the reports and outputs from the test-beds in Sharing Cities Sweden. The 12 parts bring together and present the range of activities organised through the test-beds, strategic projects and national node in Sharing Cities Sweden.



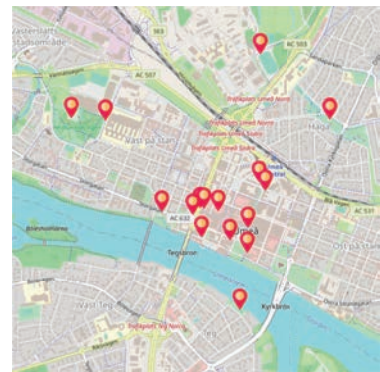
02. Sharing Catalogue



Test-bed Umeå

Explore the outputs from Stockholm: www.sharingcities.se/umeatestbed

- Smarta Kartan, en möjlig lösning? En kvalitativ studie om att främja delnings-ekonomi
- Delad vårdnad av företagsresurser: Hinder och drivkrafter till delningsekonomi mellan etablerade företag
- Nio frågor: Minska klimatpåverkan och öka social hållbarhet
- Lärdomar om att hyra ut återbrukade cyklar
- Vad krävs för implementering av Vehicle-to-grid? Insikter från processen med att etablera pilotanläggning i Umeå
- Vehicle-to-grid i parkeringshuset Nanna
- Framtidens mobilitet. Initial kartläggning av långsiktiga invånarbehov i Umeå Kommun
- Lärdomar om servicehubbar 2018-2020
- Dela grönytor
- Delad Energi: Simulering av Vehicle to Building
- Delad Energi: Vehicle-to-grid i Nanna-parkeringshus
- Fritidsbanken Umeå - Effektbedömning
- Fritidsbanken Umeå - Utlåning av parasportutrustning
- Fritidsbanken Umeå - Sommarlovsturné 2018-2020
- Integration Tomtebo
- Lärdomar om att hyra ut återbrukade cyklar
- Resvana - Nudging för nyflyttade
- Coompanion - Sharing Made Simple
- Vakins showroom



Test-bed Stockholm

Explore the outputs from Stockholm: www.sharingcities.se/stockholmtestbed

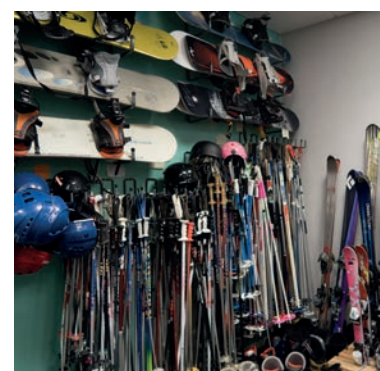
- A review of the environmental performance, and potential, of different sharing services
- Assessing the environmental potential of sharing services
- Connecting idle capacity with users focusing on business and digital platform aspects for sharing services
- Resurseffektiva lokaler i Sverige – Lokaldelning som norm
- Resource efficiency and the circular economy Handlingsplaner för ökad resurseffektivitet och cirkularitet
- Digital infrastruktur och tekniskt ramverk för att möjliggöra IoT-tjänster och delning
- Sammanfattande reflektioner och slutrapport från Sharing Cities Stockholm.
- Sjöstadens klimatspanare och framtidspanare.
- Vad krävs för att applicera Carbon Law i Sjöstaden? - Backcasting av lokala aktörers klimatomställning till 2030.
- Gör de Sjöstaden dubbelt så bra? Utvärderingar av aktörssamverkan för miljöarbete och klimatomställning i en Stockholmsstadsdel.
- Digital infrastruktur och tekniskt ramverk för att möjliggöra IoT-tjänster och delning. Sammanfattande rapport från teknikpartners i Sharing Cities Stockholm.



Test-bed Gothenburg

Explore the outputs from Gothenburg: www.sharingcities.se/goteborgtestbed

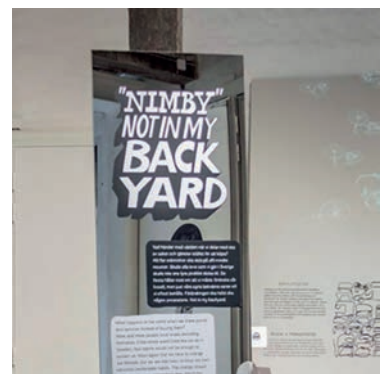
- Leksaksbiblioteket
- Kartläggning av delnings-tjänster och hur dessa bidrar till levande gatuplan
- Tillgångsbaserad konsumtion ur ett konsumtionsforskningsperspektiv
- Starta eget leksaksbibliotek: Handbok för att starta och driva leksaksbibliotek
- Delat lärande, dubbel kunskap: affärsmodellsutveckling för delningsekonomi i Göteborg
- Cirkulära mikroföretag: En kvalitativ studie om företagens behov och syn på kommunen
- Städer som testbäddar för en hållbar utveckling: Sharing City Göteborg och kommunens roll som innovationsaktör
- A mobile research lab report on Gothenburg
- Slutrapport testbädd Masthuggskajen
- Dela lokaler för levande gatuplan
- Platsutveckling för ett levande gatuplan på Masthuggskajen
- Kartläggning av delningstjänster och hur dessa bidrar till levande gatuplan
- Småskaliga och värdeskapande aktörer i Göteborg
- Sju steg för att skapa levande gatuplan – En modell för utökad aktörssamverkan mot en cirkulär kvartersekonomi
- Samnyttjan och barns friytor i den täta staden – Kunskapssammanställning
- Samnyttjan och barns friytor i den täta staden – Ett samnyttjansexempel på Masthuggskajen



Test-bed Malmö

Explore the outputs from Malmö: www.sharingcities.se/malмотestbed

- A mobile research lab report on Malmö
- Malmöbon och delad konsumtion
- Delning i Sege Park
- Utredning om delningsekonomin potential för jobbskapande och lägre levnadskostnader i Lindängen och Rosengård
- A mobile research lab report on Malmö
- Malmöbon och delad konsumtion
- Delning i Sege Park
- Utredning om delningsekonomin potential
- Urban Sharing in Malmö
- Governing sharing cities
- Collaborative Fashion Consumption in Sweden and Spain
- Car Sharing Services in Sweden and Spain
- Final report on Sharing Business Models
- Connecting the sharing economy to urban planning processes in Malmö
- Emergence of Carsharing Business Models and Sustainability Impacts in Cities
- Analysis of Sharing Economy Services: Initial Findings from Sharing Cities Sweden





03. Sharing Futures

The sharing economy can contribute to social, environmental and economic sustainability, and sharing cities can unlock new opportunities and solve urban challenges by facilitating and applying the sharing economy in urban contexts. But it is imperative that the sharing economy is shaped and designed to advance urban sustainability.

In this time of pandemics and crises (including the impacts of the corona virus and how we emerge from this pandemic as well as the global climate and biodiversity crises), it is not only about finding short-term answers to all the challenges we face today, but also about developing robust and engaging long-term visions to find our way towards a better and brighter future than before.

We need to see opportunities, including the growing momentum for building back better and bolder as well as accelerating transformation processes, as much as thinking of challenges. To understand how we can think of opportunities, of ways forward, of hope and ambition, we present twelve insights, below.



Read more: [The Future of Sharing? A Roundtable for Horizon Scanning on Sharing Cities](#)

1. When it comes to consumers there is still a largely untapped potential for them to start voting with their euros and dollars on the sharing market, in the same way, we all do when choosing sustainable or ecological products.



2. Importantly, in urban sharing the role of consumers is shifted from passive consumers to active co-producers of value, who can contribute to co-creating sustainable lifestyles in cities and communities.



3. We need to continue reducing the barriers to integrate more sharing in our daily lifestyles. And the best way to change behaviour is almost always by controlling the environment, by simply making it easier to share through infrastructure.



4. It is of course important to foster a culture of sharing where social interaction and empowering our citizens is key. Sharing as a concept in Gothenburg also includes how we can share knowledge and co-create our city.



5. Sharing hubs are never going to break out of the eco-niche unless they have an excellent user experience. The behaviour of ownership is too strong and if it cannot be made easy to use and aspirational (rather than sensible) then sharing practices will remain on the margins.



6. The sharing economy can help us overcome a crisis and strengthen urban resilience by: activating idling resources and prolonging their lifetime, reducing dependence on global supply chains, and activating people and communities.



7. In times of crisis come times of opportunity. Although dramatically affected by the pandemic, many sharing organizations provide essential services to the public together with other actors in society. The value of sharing to society is clear.



8. We are exploring how sharing can enable a greener, more liveable and climate neutral city. We need to set a clear mission in the transition and through sharing, we can enable that no one is left behind!

9. We need to build trust between different stakeholders and make space and infrastructure for sharing in our cities. Through the visibility of sharing, we can show a different way of consuming goods and services.



10. There is a tendency to focus on the benefits of sharing and equal attention should also be focused on the costs (and investments) needed to support safe, sustainable sharing in a re-configured urban system.



11. There is a lot of talk about 'system change' for sustainability, but innovations such as sharing often emerge within the current (unsustainable) 'system' (and the attended policies, regulations, and tax regimes). We need to continuously consider transitional futures.




12. The sharing economy can contribute to social, environmental and economic sustainability, and sharing cities can unlock new opportunities and solve urban challenges — but only by design and through active and robust governance.



04. Sharing Signposts





The sharing economy in cities can contribute to the SDGs, public good and urban sustainability but only through good governance and active management. Here we highlight eight key signposts to help design and develop sharing cities working with the SDGs — fostering, collaborating, measuring, impacting, governing, leveraging, connecting and disrupting.

FOSTERING: There is a broad variety of sharing initiatives and urban actors, particularly municipalities, that can foster desirable forms of sharing in many ways. A key challenge to address is how to make sharing attractive among a broader spectrum of people, and not only be a niche market associated with a certain lifestyle.

COLLABORATING: Partnerships are key — there are many different business models that include a diversity of actors, and it is important to co-design and co-create sharing cities that facilitate more sustainable consumption. A key challenge to address is how to capture the social and environmental value generated by sharing business models.

MEASURING: Metrics that assess and evaluate the sustainability impacts of the sharing economy in cities are needed in order to confirm the sustainability gains of sharing practices and organisations. A key challenge to address is how we can make people more engaged with and committed to the sustainability of the sharing economy.

“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)

IMPACTING: It is necessary to better understand the potential side-effects and impacts of sharing initiatives particularly negative environmental impacts. A key challenge to address is that there is a lot of developments in the sharing platform economy world and assessment needs to keep up with the pace.

“Sharing services are able to contribute to reduced energy and climate impact and sustainable development, but also significantly promote social innovation and sustainability in the city.” — Sharing Cities: Exploring the Emerging Landscape of the Sharing Economy in Cities (2019)

GOVERNING: Collaboration between citizens and decision-makers is crucial for effective sharing. However, municipalities should also remember to not only rely on local initiatives, but also to enforce and lead by example. A key challenge to address is to define what sharing is and what it should be in practice.

LEVERAGING: Digital solutions in the sharing economy can open up new opportunities and possibilities that, when used right, can enable resource efficiency, active citizenship and trust-building. A key challenge to address is how to regulate the access to and use of personal data derived from digital platforms.

CONNECTING: The sharing economy can be considered as a part of the circular economy. A key challenge to address is how to build trust and make partnerships between organisations in the sharing economy and circular economy — currently many goals and policies in the circular economy are heavily influenced by industry and lack engagement from citizens.

DISRUPTING: Behavior change, new technology, and leadership are crucial not only for the sharing economy but sustainability impact in general. In order to get a critical mass response it is necessary that radical policy and investments drive change. A key aspect to understand is that the sharing economy is a tool for sustainability but not the entire solution.

The sharing economy is here to stay. But if it contributes to achieving the SDGs is a matter of governance and management. Municipalities or community-based organisations are vital to creating sharing cities that contribute to public good and urban sustainability by including sharing principles in the planning and design of cities and communities. We hope the eight key signposts presented here can be a guide.



Read more - [Cities and Consumption: Sharing cities and achieving the sustainable development goals](#)



05. Sharing Labs

Sharing Cities Sweden established world-leading test-beds for the sharing economy in Stockholm, Gothenburg, Malmö and Umeå. The test-beds were designed as urban living labs or sites devised to design, test and learn from social and technical innovation in real time and in real places. Urban living labs are both an arena (a geographically or institutionally defined space) as well as an approach for exploratory and experimental collaboration between a range of actors.

Sharing Towns: The Key to the Sharing Economy Puzzle



Umeå

www.sharingcities.se/umeatestbed



Stockholm

www.sharingcities.se/stockholmtestbed



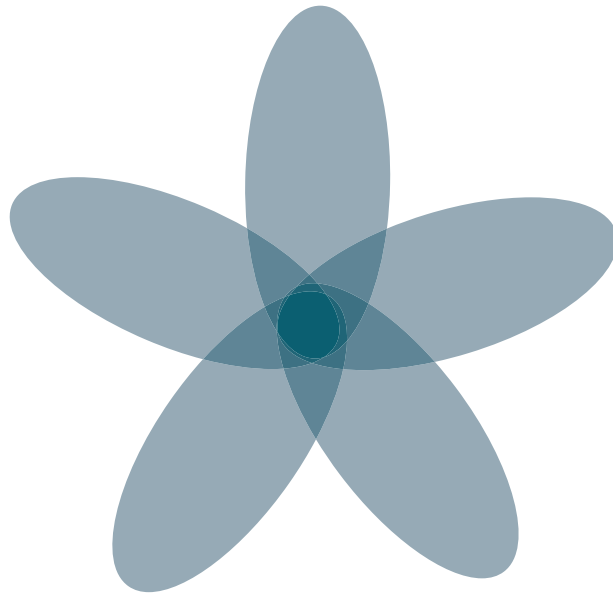
Göteborg

www.sharingcities.se/goteborgtestbed



Malmö

www.sharingcities.se/malmotestbed



The test-beds in Sharing Cities Sweden were based on the key factors that make urban living labs unique. These include:

CONTEXT: Urban living labs are located in a defined geographical area. The test-beds in Sharing Cities Sweden were located in Stockholm, Umeå, Gothenburg and Malmö. The geographical area within the test-beds was further limited to certain areas and activities.

EXPERIMENTATION: Urban living labs 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 designed, implemented and tested 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 were based on interactive collaboration with a mix of organisations and sectors.

LEADERSHIP: Clear leadership and ownership are considered crucial for urban living labs. The test-beds in Sharing Cities Sweden were designed and managed by local authorities and universities and the initiatives were managed in cooperation with a variety of partners.

EVALUATION: Urban living labs involve continuous evaluation in terms of formalizing learning, driving forwards implementation and creating impact. The test-beds in Sharing Cities Sweden systematically worked with evaluations of sharing services.



06. Sharing Developments

Sharing Cities Sweden contributed to four development projects through the test-beds in Malmö, Gothenburg, Umeå and Stockholm. The test-beds provided an innovation boost to the ongoing activities in Sege Park in Malmö, Masthuggskajen in Gothenburg, ElectriCity and Hammarby Sjöstad in Stockholm, and Campusparken in Umeå.

Sharing Cities Compass: Navigating the
Sharing Economy in Cities



Sege park

Masthuggskajen was a special focus area for the test-bed in Gothenburg. It is a development project testing concepts for how to share space and functions in the area and support sharing initiatives.



Masthuggskajen



Campusparken

Hammarby Sjöstad was the special focus area for the test-bed in Stockholm. It is a district with ambitious visions and goals for sustainable buildings, transport and lifestyles in the context of climate neutrality.



Hammarby Sjöstad

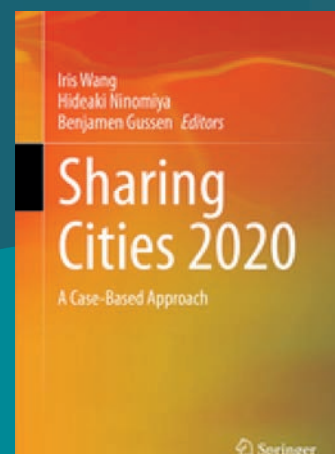
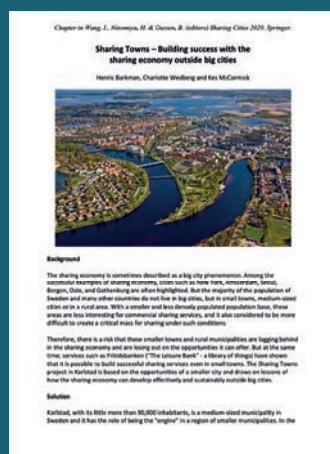
07. Sharing Stories



07. Sharing Stories

Sharing Cities Sweden contributed five chapters to the Sharing Cities 2020 book, which provides valuable insights into how cities are innovating in the field of the sharing economy through case studies in Asia and Europe. The book is a key resource for cities and communities working in this emerging field.

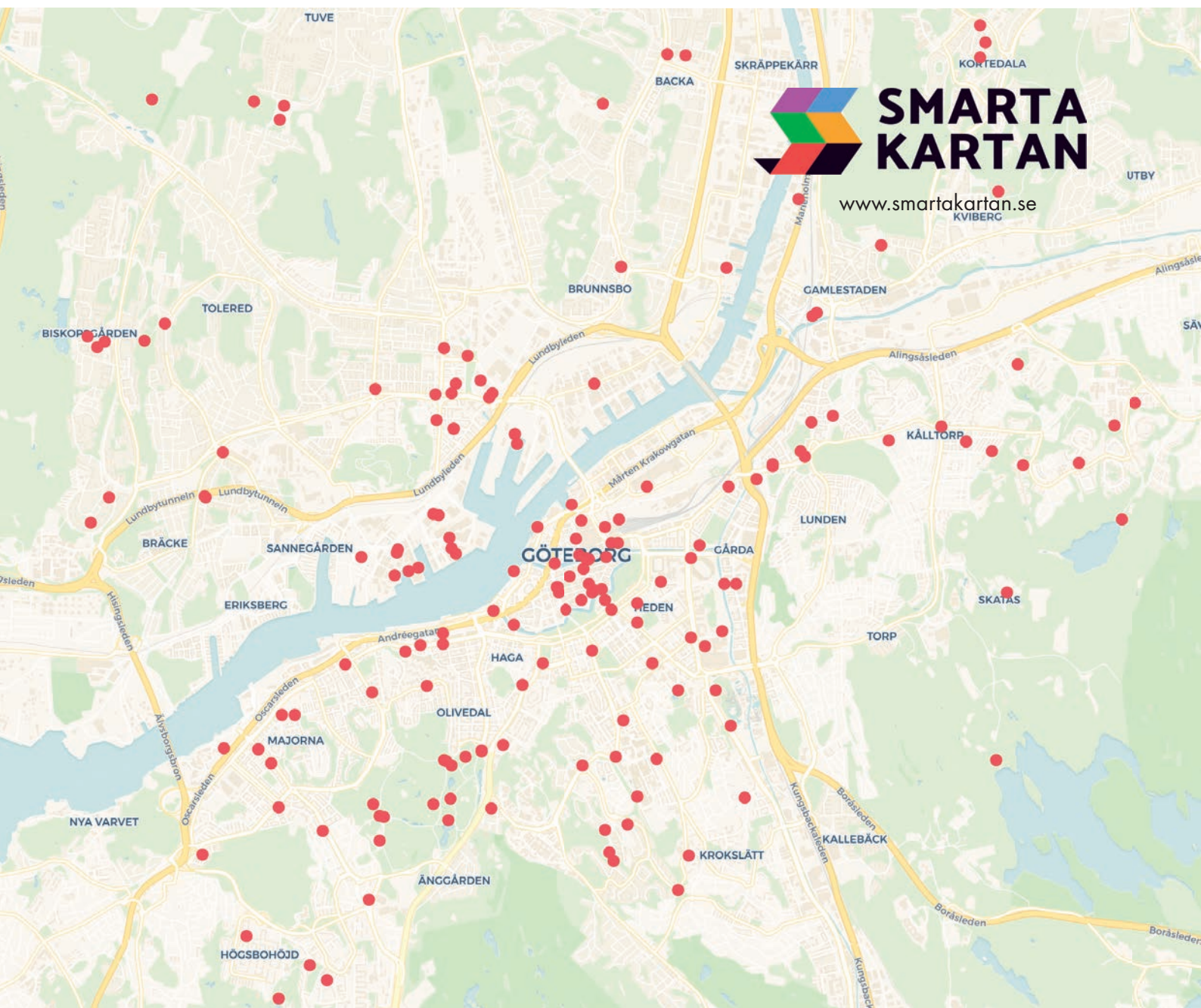
- Sharing Towns: Building success with the sharing economy outside big cities
- Gothenburg: Getting an overview of the sharing economy with the smart map
- Malmö: Connecting the sharing economy to urban planning processes
- Stockholm: Developing a citizen engagement laboratory for a local climate goal and the sharing economy
- Umeå: Contributing to sustainable growth and inclusivity through the sharing economy



08. Sharing Maps

Smarta Kartan – or the Smart Map – is a digital platform and guide to the local sharing economy. The aim of the Smart Map is to show how people can easily engage in sustainable and healthy lives and prioritise access over ownership.

On the Smart Map people can find bike kitchens, swap groups, clothing swap days, free shops and digital platforms. Sharing Cities Sweden contributed to the expansion of Smarta Kartan from Gothenburg to also include Malmö Umeå, Stockholm and Karlstad.



09. Sharing Investigations

Sharing Cities Sweden conducted a range of investigations into the sharing economy in cities and produced a collection of reports and outputs. Here are three key publications with case studies from across Sweden.

- [Sharing Cities Compass: Navigating the Sharing Economy in Cities](#)
- [Governing Sharing Cities: Exploring the Roles of Municipalities](#)
- [Sharing Towns: The Key to the Sharing Economy Puzzle](#)



10. Sharing Collaborations

Sharing Cities Sweden collaborated with a range of organisations in Europe and around the world. Working with the Sharing Cities Alliance, Sharable, the Sharing Economy Association of Japan and Sharing Cities Action were vital partnerships to building connections to ongoing and emerging initiatives on the sharing economy in cities globally.



11. Sharing Projects



Sharing Cities Sweden conducted six 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 covered the topics of digital platforms, business models, small towns, behavioural economics, social drivers and future developments.

www.sharingcities.se/investigating



A.

Sharing Digital Platforms

Creating and testing user-centred digital sharing platforms tailored for Sweden.

"The purpose of this strategic project was to investigate whether digital sharing platforms that are based on a more user-centered sharing philosophy can solve the problems of the earlier platforms which tended to be more resource-centered."



B.

Sharing Business Models

Conducting an international investigation of business models for the sharing economy in cities.

This strategic project investigated the emergence of novel business models in the sharing economy in Sweden, the UK and Europe."



C.

Sharing Towns

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

"This strategic project focused on developing the sharing economy in small cities and towns where there are different conditions and characteristics to large cities."



Sharing Behaviour

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

"This strategic project increased our understanding of cognitive, motivational and contextual factors affecting decision-making processes of environmentally-friendly choices in urban sharing initiatives. "



Sharing Communities

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

"This strategic project focused on how housing companies can facilitate sharing among tenants and offer space for sharing."



Sharing Futures

Mapping scenarios and pathways for the sharing economy in cities.

"This project explored scenarios and pathways for the sharing economy in cities and analysed how sharing cities can contribute to and deliver on decarbonization and multiple co-benefits."



12. Sharing Courses

In addition to the reports and outputs, Sharing Cities Sweden created a Sharing Cities Massive Open Online Course that brings together films, podcasts, publications and materials into an online learning community on the sharing economy in cities. Sharing Cities Sweden is also featured in the Sustainable Cities Massive Open Online Course as well as the City Futures Academy – an online learning community on cities, sustainability, innovation and governance with over 100,000 participants.

The recent coronavirus pandemic and the backdrop of the unfolding climate crisis present humanity, governments, organisations and individuals with enormous challenges. The coronavirus pandemic has impacted our society and economy in immediate and profound ways while the climate crisis has exposed the current systems of production and consumption as profoundly untenable. But there are also incredible opportunities to bring about transformations towards urban sustainability.

What role can the sharing economy play in meeting sustainability ambitions? This is a key question in the Massive Open Online Course by Sharing Cities Sweden that connects the sharing economy, cities, governance and urban sustainability to provide

unique knowledge and insights into sharing cities. Launched in May 2020 and updates in August 2021, the course utilizes a diversity of leading examples of the emerging sharing economy in cities to bring the content to life.

In broad terms, the sharing economy offers innovative solutions for sharing, renting and replacing under-utilized assets, often using digital platforms, visualization technology and ICT that connects individuals and organisations in the sharing economy by informing about supply and demand. There are a combination of ways to shape the sharing economy in cities, including regulating, self-governing, providing, enabling and collaborating.



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



Self-governing: The mechanism of self-governing by municipalities refers to organisational management when municipalities adopt sharing practices within their operations. For example, this can be through procurement practices or when different municipal units engage in sharing activities with each other.



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



Enabling: Municipalities can enable the sharing economy through persuasion, argument and incentives. Municipalities can facilitate collaboration between sharing economy organisations, provide information about sharing and offer training on the topic. They can also organise competitions and offer voluntary certification schemes to recognise the best sharing practices in their city.



Collaborating: Municipalities can also enter into partnerships with sharing economy 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.

Thanks to all the participants and contributors to Sharing Cities Sweden!

"The sharing economy can contribute to social, environmental and economic sustainability, and sharing cities can unlock new opportunities and solve urban challenges by facilitating and applying the sharing economy in urban contexts. But it is imperative that the sharing economy is shaped and designed to advance urban sustainability."



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