

### Cities and Consumption: Sharing cities and achieving the sustainable development goals

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### CITIES AND CONSUMPTION

Sharing cities and achieving the sustainable development goals





In October 2019, over 200 people from around the world gathered at the Sharing Cities Summit in Sweden for a conference in Lund and an exhibition and workshops in Malmö. The combination of people from municipalities, academia, sharing initiatives, NGOs and SMEs created a vibrant environment for critical discussions. The focus of the event was centered on the connections between the Sustainable Development Goals and sharing economy in cities. This public event was followed up by further analysis on this topic leading to the publication of this synthesis report in December 2020.

Title: Cities and Consumption: Sharing Cities and Achieving the Sustainable

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## SUMMARY



We summarise how the SDGs and sharing cities are intimately related and need to be fully connected.

Agenda 2030 for Sustainable Development provides a shared blueprint for peace and prosperity for people and the planet. At its core are the 17 Sustainable Development Goals or SDGs.

This synthesis report utilizes 8 key themes to explore how can we shape and design sharing cities to contribute to the SDGs as well as what actions can we take to reinforce the SDGs in sharing cities. It is a call for accelerated and integrated action on sharing cities and the SDGs.

Enabling sharing towns and communities	Developing business models for the sharing economy
Evaluating sustainability impacts of sharing cities	Institutionalizing sharing practices
Governing sharing cities	Leveraging digitalisation for sharing cities
Connecting the sharing and circular economy	The future of sharing

The sharing economy is emerging in a diversity of sectors from mobility to space to products and services. In broad terms, the sharing economy offers innovative solutions for sharing, renting and replacing under-utilized assets, often using digital platforms.

Sharing economy organisations vary in terms of size, market orientation and organisational form. These initiatives and organisations are transforming production and consumption systems in cities around the globe in both positive and negative ways.

Sharing cities often refer to when municipalities or community-based organisations are playing a leading role in engaging with the sharing economy including by integrating sharing principles in the planning and design of cities and communities.

The sharing economy in cities can contribute to the SDGs from environmental, social and economic perspectives but not by default – only by design. Actively shaping the development of sharing cities is imperative to meet ambitions on the SDGs.

This synthesis report concludes with 8 key signposts to help direct sharing cities working with the SDGs – fostering, collaborating, measuring, impacting, governing, leveraging, connecting and disrupting.

"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)



"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)



We start by introducing the sharing economy and the SDGs and what needs to be on the agenda.

"The sharing economy is not sustainable by default, so we must be strategic and deliberate in how we design and implement sharing economy business models."

Steven Curtis and Oksana Mont (2020)
 Sharing economy business models for sustainability

Learn more about the sharing economy business models tool. This should be of interest not only to researchers and practitioners, but also to advocacy organisations and policy-makers who are concerned about the sustainability performance of sharing platforms.



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### INTRODUCTION

The sharing economy is emerging in a diversity of sectors from mobility to space to products and services. 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. But it is imperative that the sharing economy is shaped and designed to advance goals for urban sustainability and the public good.

Sharing economy organisations vary in terms of size (from global home sharing platforms to local clothes libraries), market orientation (from for-profit car-sharing companies to non-profit tool pools) and organisational form (from municipal bicycle sharing schemes to umbrella sharing businesses to community-based toy libraries). All these initiatives are transforming production and consumption systems in cities around the globe – in both positive and negative ways.

Sharing cities often refer to when municipalities or community-based organisations are playing a leading role in engaging with sharing economy organisations or enabling citizens to share by including sharing principles in the planning and design of cities and communities. Sharing cities facilitate those sharing economy organisations that deliver public good and urban sustainability, while restricting those that bring risks and negative impacts for urban citizens.



# What is Sharing Cities Sweden?

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.

The sharing economy can contribute to social, environmental and economic sustainability, and sharing cities can unlock new opportunities and solve urban challenges. Furthermore, the sharing economy can contribute to redesigning our economies and communities in the face of pandemics and crises. But it is vital that the sharing economy in cities is shaped and designed to advance goals for urban sustainability and the public good.

Sharing Cities Sweden aims to put Sweden on the map as a country that actively and critically works with the sharing economy in cities. It is a national program with a budget of 12 million euro over 4 years. Sharing Cities Sweden is a part of Viable Cities - a strategic innovation program for smart and sustainable cities. Sharing Cities Sweden is focused on the role of the sharing economy to contribute to sustainability ambitions.

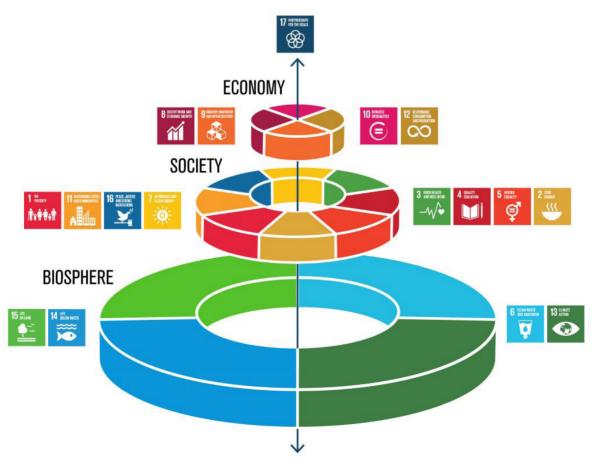
The objectives of Sharing Cities Sweden are to develop world-leading test-beds for the sharing economy in Stockholm, Gothenburg, Malmö and Umeå as well as develop a national node to significantly improve national and international cooperation on sharing cities. Through the test-beds, sharing services and digital solutions are being developed. The opportunities and risks of the sharing economy are also being tested and evaluated.



# WHAT ARE THE SUSTAINABLE DEVELOPMENT GOALS?

Agenda 2030 for Sustainable Development – adopted by all United Nations Member States in 2015 – provides a shared blueprint for peace and prosperity for people and the planet. At its core are the Sustainable Development Goals or SDGs, which are an urgent call for action by all countries in a global partnership with citizens. As suggested, a key question is how sharing cities are able to contribute to Agenda 2030 for Sustainable Development. Below we see all 17 SDGs.

There are 17 SDGs that range from ending poverty to combating climate change. Another way to reflect on the SDGs is to arrange the goals under the topics of biosphere, society and economy. There are 4 goals that relate strongly to the biosphere, 8 goals focused on society and 4 goals on the economy. In addition, there is the key goal of partnerships that cuts across all the SDGs. Below we see the relationships between the SDGs with the biosphere, society and economy as well as the pivotal role of partnerships and collaborations.

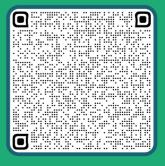




"The sharing economy is a new form of resource distribution that is affecting traditional markets, cities and individuals, and challenging the prevalent regulatory frameworks, social norms and belief systems."

Lucie Zvolska, Yuliya Voytenko Palgan and Oksana Mont (2019)
 How do sharing organisations create and disrupt institutions?
 Towards a framework for institutional work in the sharing economy

Learn more about a framework for institutional work applied to the sharing economy. This should be of interest in terms of the ways in which sharing economy organisations work to create new or disrupt prevalent institutions.



**LEARN MORE** 



We utilize 8 key themes to explore how can we shape and design sharing cities to contribute to the SDGs as well as what actions can we take to reinforce the SDGs in sharing cities.

# ENABLING SHARING TOWNS AND COMMUNITIES

# 'How can the sharing economy/cities contribute to sustainable cities and communities?'

At the local level, there is a possibility to foster sharing initiatives "under the radar", and not be captured by large actors operating in the conventional linear markets, nor the large profit-seeking actors in the sharing markets.

A collaborative mapping exercise is a useful first step, not only for making an inventory, but also for strengthening the network of actors in the sharing economy.

- 1. On sharing and sustainability, the most important aspect that sharing does is to build social capital. This, in turn, builds capacity to respond to multiple challenges, including environmental.
- 2. There are different ideas on which sharing initiatives cities should support: those that are transformational and build social capital, those that respond to the current challenges of the city or the non-for profit initiatives?
- 3. Fostering sharing initiatives is part of transforming the role of city governments, in light of the fact that a growing number of people are "fed-up" with excessive consumption.

A key lesson is there is a very broad variety of sharing initiatives and municipalities can foster desirable forms of sharing in many ways.

A key challenge to address is to make sharing attractive among a broader spectrum of people, and not only be a niche market associated with a certain lifestyle.



# DEVELOPING BUSINESS MODELS FOR THE SHARING ECONOMY

# 'How can the sharing economy/cities contribute to decent work and prosperous economy?'

- 1. We need integrated and systemic solutions and thus should not look at individual business models in isolation. The concept of "ecologies of business models" explores how business models interact with each other, based on three factors: impacts (whether new sharing business models aim to modify, destroy or create relationships with existing non-sharing models); dependencies (to what extent new business models rely on existing resources, infrastructure, products and services); and nature of dependencies (whether they are neutral, competitive, or symbiotic).
- 2. We have to redefine success. For example, in the case of a clothing library, is it success if people are still addicted to consuming new clothes?
- 3. Cooperative sharing platforms can help empower people to create their own socially oriented businesses.
- 4. Regarding the fact that sharing is not inherently sustainable, business models can help incentivize desired consumer behavior. For example, pay-per-use models have the potential to decrease consumption in a way that subscription models do not. But, specific revenue streams and other business model attributes should be considered based on the context and value orientation of the business.
- 5. Looking beyond individual consumers, business models can also target aggregated groups such as housing associations.

A key lesson is that 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 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?



# EVALUATING SUSTAINABILITY IMPACTS OF SHARING CITIES

# 'How can the sharing economy/cities lead to more sustainable consumption and production?'

- 1. High sustainability expectations of urban sharing organizations can be found in the literature. However, the sustainability impacts of these organizations have not been measured adequately.
- 2. It is important to evaluate the sustainability of sharing cities from two perspectives: macro (city impacts) and micro (urban sharing organizations) levels.
- 3. There are several ways to understand the impacts of the sharing economy and this affects methods for assessment.
- 4. Is important to identify the urban sharing organizations that practice "true" sharing. This means to determine if organizations share idle capacity.
- 5. In order to measure the sustainability impacts of sharing organizations there is also need to have access to data.

A key lesson is that metrics that assess sustainability impacts are needed in order to confirm the sustainability gains of the sharing economy.

A key challenge to address is how can we make people more engaged with the sustainability of the sharing economy?



## INSTITUTIONALIZING SHARING PRACTICES

## 'How can partnerships underpin the sharing economy/cities?'

- 1. It is important to understand how sharing organisations engage in maintaining institutions they can create and disrupt, but can they maintain? Disruption versus maintaining is an important issue.
- 2. Non-profit, local sharing initiatives should not be forgotten or downplayed versus the large commercial companies like AirBnB and Uber.
- 3. It is difficult to develop a common policy for different platforms. Cities are getting together to try to develop a common set of guidelines governing the sharing economy. But it is really difficult to have a policy that is executable and applicable for all cities and platforms.
- 4. The negative impacts of sharing initiatives must be addressed as appears to be the case in many cities. For example, AirBnB is pushing up housing prices in some cities. AirBnB also convinces people to travel more which leads to an overall negative environmental impact, more than hotels because it is cheaper and easier to travel.
- 5. If you want to promote sustainable and smart lifestyles and practices then it is important to engage key actors and citizens early in the process of development. This is most certainly the case with sharing initiatives.

A key lesson is to better understand the potential side-effects of sharing initiatives particularly negative environmental impacts.

A key challenge to address is that there are a lot of developments in the sharing platform economy world. A government does not only have to stop, regulate, enforce things or regulate taxes. It is also possible to stimulate sharing initiatives that are producing positive impacts.



## GOVERNING SHARING CITIES

## 'How can governance shape the sharing economy/cities?'

- 1. Co-developing policy and ideas together with citizens is key.
- 2. Cities should also consider stronger use of laws and regulations when needed. For example in terms of demands in public procurements, or in removing parking spaces to benefit sharing spaces.
- 3. Sharing can be supported both bottom-up and top-down. Bringing stakeholders together to support sharing and spur interest and initiatives is a good start and doing a policy experiment for a limited amount of time can also work.
- 4. Make use of existing networks of local organizations, churches, and sport clubs. Involve them and think about how to use their spaces, how to engage them and reach out to their already existing networks.
- 5. Sharing is affecting real estate companies and how both private and public spaces are used. There is a need to cater for new requirements of tenants, of not renting space 7 days a week, but rather 1-2 days a week. Public spaces can be made more available. For example, schools could be made available for sharing during evenings and weekends.

A key lesson is that collaboration between citizens and decision makers is crucial for effective sharing. But 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 better define what sharing is and what it should be in practice. Where do we want to take it? There are conflicting visions and interests. Securing economic viability for sharing initiatives is also a challenge.



# LEVERAGING DIGITALISATION FOR SHARING CITIES

## 'How can digitalisation support the sharing economy/cities?'

- 1. Putting the user at the center of sharing business models opens up new opportunities for creating solutions together.
- 2. Everybody has something to offer, this could be leveraged through new digital sharing solutions.
- 3. Digitalisation is a way to meet local challenges. But it is only one part. We also need to understand the balance between the digital world, physical meetings and trust-building which are all essential components.
- 4. Content matters. A digital platform is nothing without the content that is what creates the value behind it all. Dare to launch ideas even if they are not yet perfect. Learning by doing is a worthwhile way to go forward.
- 5. There are important discussions to have on access to and use of personal data derived from digital platforms.

Akey lesson is that digital solutions in the sharing economy open up new opportunities that, when used right, can enable resource efficiency, active citizenship and trust-building.

A key challenge to address is how to regulate access to and use of personal data derived from digital platforms.



# CONNECTING THE SHARING AND CIRCULAR ECONOMY

## 'How can the sharing economy/cities connect to the emerging circular economy?

So much is happening in the sharing and circular economy that it is difficult to get a good overview.

- 1. We have to look at the big picture when talking about the sharing and circular economy, not only on sector-specific solutions, and what will be most relevant to the community.
- 2. It is important to look at value retention processes and alternative business models to retain more value in the sharing and circular economy.
- 3. Mapping of initiatives and open access are key components to seeing opportunities and connecting stakeholders in the sharing and circular economy.
- 4. We need to have goals not as influenced by industry when it comes to the sharing and circular economy.

A key lesson is that the sharing economy can be considered as a part of the circular economy and that initiatives can be considered on the regional level and involve partnerships between citizens, municipalities, and businesses.

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 are too heavily influenced by industry or lacking engagement from citizens.



### THE FUTURE OF SHARING

## 'How can the sharing economy/cities develop and evolve in the future?'

- 1. Creating circumstances in cities for collaborations through promotion of initiatives and joint learning is pivotal to a healthy and sustainable sharing economy.
- 2. Collaboration is key to solve problems regarding sustainability and engagement of communities in solutions for cities.
- 3. Sharing can enable changes in consumption patterns and help address sustainability issues.
- 4. Local networks are important to share ideas, best practices, and failures to improve issues. Platforms (like AirBnB and Uber) may be considered more capitalistic (than local networks) but this depends on what works best for cities in terms of sustainability.
- 5. Behavior is a central aspect, as people need to understand about the sharing economy in order to get a critical mass impact.

A key lesson is that 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 challenge to address is that cities should be designed for people, including vibrant public spaces, sustainable transportation, and suitable services. The sharing economy is a tool for sustainability but not the entire solution.





We conclude with 8 key signposts to help direct sharing cities working with the SDGs – fostering, collaborating, measuring, impacting, governing, leveraging, connecting and disrupting.



"Sharing economy platforms are transforming production and consumption systems in cities around the world ...

Addressing sustainability issues, its actual economic, social and environmental impacts remain poorly understood. Advancing more sustainably promising forms of sharing and leveraging its benefits is becoming increasingly important."

 Oksana Mont, Yuliya Voytenko Palgan, Karin Bradley and Lucie Zvolska
 (2020) A decade of the sharing economy: Concepts, users, business and governance perspectives

Learn more about the roles and perspectives of users, businesses and municipal governments in institutionalising the sharing economy. This should be relevant for exploring the sustainability implications of the sharing economy from different perspectives.



### REFLECTIONS

This synthesis report utilizes 8 key themes to explore how to shape and design sharing cities to contribute to the SDGs as well as what actions to take to reinforce the SDGs in sharing cities. Accelerated and integrated action on sharing cities and the SDGs requires significant ambitions and investments by actors engaged in the sharing economy in cities. This synthesis reports concludes with 8 key signposts based to help direct and inspire sharing cities working with the SDGs.

### **FOSTERING**

There is a broad variety of sharing initiatives and urban actors, particularly municipalities, can foster desirable forms of sharing in many ways.

A key challenge to address is 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 the sustainability impacts are needed in order to confirm the sustainability gains of the sharing economy.

A key challenge to address is how can we make people more engaged with the sustainability of the sharing economy.

#### **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 a lot of developments in the sharing platform economy world. A government does not only have to stop, regulate, enforce things or regulate taxes. It is also possible to stimulate sharing initiatives that are producing positive impacts.

### **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 better define what sharing is and what it should be in practice. Where do we want to take it? There are conflicting visions and interests. Securing economic viability for sharing initiatives is also a challenge.

### **LEVERAGING**

Digital solutions in the sharing economy can open up new opportunities that, when used right, can enable resource efficiency, active citizenship and trust-building.

A key challenge to address is how to regulate 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 and that initiatives can be considered on the regional level and involve partnerships between citizens, municipalities, and businesses. It is all about connections.

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 and too heavily influenced by industry or lacking 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 challenge to address is that cities should be designed for people, including vibrant public spaces, sustainable transportation, and suitable services. The sharing economy is a tool for sustainability but not the entire solution.





# WANT TO LEARN MORE ABOUT SHARING CITIES?

## CHECK OUT THE MASSIVE OPEN ONLINE COURSE (MOOC) ON SHARING CITIES!

This MOOC explores the sharing economy in cities in Sweden, Europe and around the world. It connects together the key themes of the sharing economy, cities, governance and urban sustainability. 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.



https://www.coursera.org/learn/sharing-cities/home/welcome







In October 2019, over 200 people from around the world gathered at the Sharing Cities Summit in Sweden for a conference in Lund and an exhibition and workshops in Malmö. The combination of people from municipalities, academia, sharing initiatives, NGOs and SMEs created a vibrant environment for critical discussions. The focus of the event was centered on the connections between the Sustainable Development Goals and the sharing economy in cities. This public event was followed up by further analysis on this topic leading to the publication of this synthesis report in December 2020.

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