Action plan to promote sharing economy and circular economy in Helsingborg



Source: Illustration from the European Environment Agency's publication Miljösignaler 2014





1. Mission

In the spring of 2017, the City of Helsingborg took advantage of the business sector in a new venture to better meet future challenges. More than 40 people with expertise and experience from almost as many industries were recruited into four so-called reform groups. In the spring of 2018, the groups submitted action proposals to the city's management in the four cross-sectoral areas of Digitization, Integration, Entrepreneurship and Climate.

The Climate Reform Group, among other things, pointed out that the municipality should work towards a circular economy by:

- 1. Making consuming sustainably and preventing waste easier for residents
- 2. Acting as a contractor and employer
- 3. Developing and providing infrastructure/systems for waste management and waste prevention

On June 12, 2018, the City Council of Helsingborg commissioned the municipality to produce an action plan for how the City of Helsingborg will promote sharing economy in accordance with the intentions of the reform group.

2. Purpose of the action plan

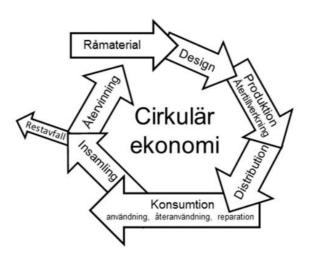
The purpose of the action plan is for Helsingborg to be at the forefront when it comes to sharing goods and services and starting the journey on the road to a circular economy. The action plan extends until 2024. It identifies actions that are ongoing or planned and appropriate development projects in the three areas that the reform group has pointed out.

Limitations

Since the reform group uses the concept of circular economy in its final report, we have interpreted the assignment so that we will develop measures for both sharing economy and circular economy.

Circular economy refers to materials that are used in society, being included in a cycle, so that goods can be divided into their constituents and become resources in production again.

Sharing economy is a part of the consumption in circular economy. Sharing economy means that customers choose not to own a product themselves, but instead share it with other users, for example, by renting or leasing. When doing so, less resources are consumed and the customer does not have to handle waste when the product has served its purpose. In a sharing economy, the landlord/manufacturer is responsible for the goods and is expected to be able to upgrade and maintain the product so that no waste is generated.



The Cycle starts with Raw materials - Design- Production and Refabrication-Distribution- Consumption, use-reuse-repair, Collecting- Recycling – and the Cycle ends with a small amount of Residual waste

Source: Naturvårdsverket

Link to other policy documents

The Environmental department, NSR, SBF and others have an assignment to develop the city's measures to achieve decided goals in the municipality's waste plan. Since the waste plan has several similarities with measures needed for circular economy, the work on the assignment is coordinated to develop an action plan for circular economy. The measures in this plan will therefore be lifted and developed in the forthcoming waste plan where appropriate.

Helsingborg's climate and energy plan 2018-2024 show that there is a sharp reduction in emissions and resource use in all sectors of society in order for us to contribute to the 1.5 degree warming according to the Paris Agreement. The plan shows that an average Helsingborg citizen needs to reduce his or her resource use or ecological footprint by two-thirds to get down to sustainable levels.

Circular/sharing economy are also involved in the Quality of Life Program 2016-2024, Waste Plan and Waste Management 2020, Regional Waste Plan 2020-2024 and in the Business Program 2020-2023.

How we produced the action plan

During 2018 and 2019, we worked in a corporate-wide working group. The Environment Department (MF), Executive Management Office (SLF), City Planning and Technical Services Department (SBF), the H22 project, NSR and Helsingborgshem have participated in the work.

We have read up on relevant literature and applicable research regarding the current state of sharing economy and circular economy in Helsingborg. We have done a foresight analysis of the world in this area. In the area that deals with our own procurement, we conducted a survey on leasing within the Helsingborg Group, as well as an analysis of what the ten largest purchasing areas are and how to increase the circular solutions in these ten areas.

At a broad workshop in the spring of 2019, we worked on actionable proposals in the spirit of the reform group. In the working group we have then worked to obtain the correct formulations.

3. Trends and the external

A European Green Deal

"EU Commission President Ursula von der Leyen describes "A European Green Deal" as one of the first items on her agenda for Europe during the next 5 years. The agenda forms the basis for the ongoing negotiations on the EU's long-term budget.

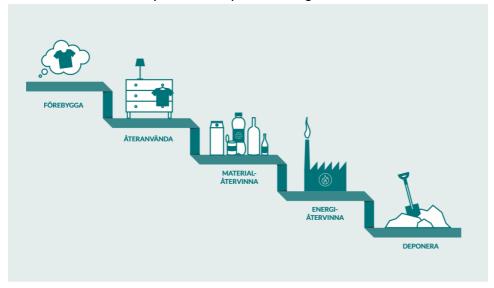
The agenda states, among other things, "We will be a world leader in circular economy and clean technologies"

The EU's circular economy package

In order to facilitate the transition to a more circular economy, the Commission has developed a circular economy package. It aims to focus on those issues where action at EU level provides real added value and can bring about concrete changes. The package contains revised legislative proposals on waste as well as an overall action plan. The Circular Economy Action Plan sets out measures to end the cycle and manages all phases of a product's life cycle: from consumption and production to waste management and the market for recycled raw materials. The action plan also includes a number of measures aimed at market barriers in specific sectors or material flows, such as plastics, food waste, crucial raw materials, the construction and demolition industry, biomass and bio-based products, as well as comprehensive measures in areas such as innovation and investment.

EU Waste Directive

Within the EU, the Waste Directive (2008/98 / EC) acts as a legal framework in Europe. According to the directive, waste is primarily to be prevented and, ultimately, be landfill. In addition, there is a requirement for national waste prevention programs. Rules and means of control must be composed by member countries to guide waste management in this direction. The means of control should focus on the waste streams that have the potential to produce large environmental benefits.



Figur 1. EU:s avfallshierarki visar i vilken prioritetsordning avfall ska hanteras (Källa: Avfall Sverige).

Swedish delegation for circular economy

On April 12, 2018, the Government decided to implement a circular economy delegation with the aim of nationally and regionally strengthen the transition of the society to a resource-efficient, circular and bio-based economy. The delegation and its office were placed at the Swedish Agency for Economic and Regional Growth (Tillväxtverket), and they submitted a partial report in February 2019.

The transition from linear economy includes increasing consumer awareness and their desire to consume at a slower pace, where products are given a longer life through recycling, reusability, etc. New business models need to be developed, where the ability of a product to be handled circularly already is implemented at the design stage.

For the business sector, it is about creating a business benefit, and a demand for products that are not made of virgin material, and business opportunities for by-products and residues from manufacturing. It can also be about brand new business opportunities where functions and services are sold or rented, instead of ownership. Another possibility is industrial symbiosis, where companies gather around a production chain, where one's by-product is the other's raw material. The development of digitalization and AI are also factors that can contribute to a faster transition.

Fossil-free Sweden 2030 and various industry's roadmaps to be climate neutral

The Fossil-Free Sweden initiative is handling the task of speeding up the Swedish climate change adaptation and has therefore invited the industries to write their own roadmaps for fossil-free competitiveness and the response has been great. Public procurements are identified as an engine in the transition and a large part of the solutions is about moving from linear to circular flows.

So far, 13 roadmaps have been delivered to the government:

- Mining Material Industry
- Concrete Industry
- Construction and engineering sector
- Cement Industry
- Food retail Industry
- Airline industry
- Mining and mineral Industry
- IT Consulting
- Shipping Industry
- Forestry
- Steel Inustry
- Heating Industry
- Haulage Industry

Regional work to achieve a more resource efficient society

In November 2019, the regional waste plan was adopted in northwestern Skåne. One of the aims of the plan is to direct municipalities waste management in the direction of a sustainable society and a circular economy. The regional management will contribute with many positive effects for the participating municipalities, and thus also for Helsingborg.

The waste plan has four target areas that indicate how the region should look at waste and indicate the direction for how we can contribute to a resource-efficient society by 2024:

- 1. Prevent waste of resources
- 2. Waste as a resource
- 3. Prevent and limit littering
- 4. People and climate in focus

Six waste types have been identified as prioritized in the region: food waste, plastic waste, bulky waste, textile waste, sewage sludge, excavated masses

Trade and consumption

Swedish consumption report from Gothenburg University 2018 shows that between 2010 and 2017, consumption in Sweden increased by 16 percent. Repairs to home electronics, computers, furniture, shoes and home appliances decreased during the period 2008-2017. The Swedish people buy less secondhand and they increasingly buy goods and services via the Internet. But the Swedish Environmental Protection Agency believes that consumption behavior is now undergoing a major change and speaks of a "system change" where consumers are, to a greater extent, ready to change their consumption patterns.

The Swedish Environmental Protection Agency, which annually assesses Sweden's environmental goals, says in the report on sustainable consumption and production that Sweden's ecological footprint, the resources our consumption and lifestyle use in both Sweden and other countries, is about four times larger than what is considered to be long-term sustainable.

In order to reduce the environmental impact of Swedish consumption, efforts that stimulate both sustainable production, sustainable products and sustainable consumption are needed. The individual consumer is an important part of the solution, but can not solve the whole problem by choosing environmentally smart.

A change to a circular economy will require major changes in the current regulations as well as changes in entire value chains, including product design, business models and consumer choices, but also in the management of built-in resources and chemicals in society. This is to maintain the value of the material throughout the life cycle. Resources that are lost as a result of the fact that it is not economically viable to reuse/recycle them and because the content of dangerous substances need to be identified. The knowledge of location, volume of material storage and values embedded in society are important for the design of recycling techniques, as a basis for the development of new specialized stakeholders, new business models and effective means of control.

In 2017, the Swedish trade organization – Svensk Handel - published the report "Together towards 2030 – The Trade sustainability efforts intensifies". The report shows how Swedish merchants increasingly work sustainably - environmentally, socially and economically – since they are driven by conscious consumers.

The goal for the industry as a whole is to by 2030 achieve all of the 17 goals for sustainability set by the UN. One of these goals is circularity – to close the circulation of goods and materials in the economy.

One sign of the times is that the Trade Investigation Institute 2018 designated the recycled garment as this year's Christmas present. Several major clothing companies, such as H&M and Kappahl, now offer the possibility to hand in old textiles in their stores. Furthermore, large companies like Ikea are shifting to circular flows, and they mean that it is a survival issue. Since Ikea affect many subcontractors in Sweden and Europe, the company's long-term focus is of great importance for the development of the circular economy. A more local sign in time may be that since the fall of 2019, Myrorna operates a new second hand store on Kullagatan in Helsingborg, as well as a store at the Emporia shopping center in Hyllie.



The current situation for sharing and circular economy in Helsingborg city

For many decades, the City of Helsingborg has been at the forefront when it comes to environmental work and quality of life. Therefore, the Helsingborg citizen can already utilize a lot of sharing services today, provided both by the city, NSR and private companies that are using circular business models. New digital services make sharing economy through a smartphone possible for more and more people. In the appendix to the action plan, there is a longer account of what the situation looks like in the autumn of 2019. There is also a report of the ongoing work, which is already being done in the spirit of the reform group.

4. Measures

The Climate Reform Group divided possible measures into three areas. Suggestions for measures in these areas are given below.

- A. Measures to make it easier for residents to consume sustainably and prevent waste
- We will work out a concept to reduce waste and waste transport in residential
 areas that have the three pipes circular sewer system. The concept is called the
 The House of Resources and is part of a project, Circ-NSR, supported by the
 EU's Interregional Program for the North Sea region. The measure is expected
 to continue during 2020-2022. The project also includes a learning process for
 incorporating the concept into upcoming larger residential areas.

Collaboration between: Executive Management Office (SLF), NSR, NSVA

 We strive for more circular centers to emerge either centrally in the city or at other strategic locations. Examples: Retuna in Eskilstuna, E-commerce Park and more.

Collaboration between contractors with circular business models and Economic Development & Marketing (NOD), Executive Management Office (SLF)

 We develop the inner-city recycling for furniture and gadgets and explore opportunities to open up internal recycling to the public.

Collaboration between: Environmental department, School and Youth Services Department (SFF), Labor Market Department (AMF) and Executive Management Office (SLF) purchasing

 We are launching research and development projects in the city to contribute to increased resource management and circular flows, to effectively reduce parts of the large residual flows to different types of soil, nutrients, building materials and raw materials.

Collaboration between: Vera park, NSR, NSVA, research stakeholders and the business sector

 Within the framework of Recolab's operations for local residents, we work to increase the interest in and knowledge of circular solutions among local residents.

Collaboration between: ÖKAB. NSVA and NSR

• Within the framework of Habiteum's activities for local residents and businesses, act as support for moving forward with circular solutions

Collaboration between: City Planning and Technical Services Department (SBF) Environment Department (MF) School and Youth Services Department (SFF) Öresundskraft, NSVA, NSR, Helsingborgshem and a number of other actors, such as individual residents, the voluntary sector and the business sector.

B. Measures to act as contractors and employers

Fact box

Helsingborg city is the municipality's largest employer with over 9,000 employees. Helsingborg city trades for approximately 3,4 billion a year.

The city's largest purchasing areas are:

27 % Building contracts and maintenance 16 % Electricity, heat and water 3 % Food

Other major purchasing areas are IT and technology hardware, fixtures and fittings, healthcare aids, consumables, media and educational materials, vehicles and machines, and communication services.

In the fact box the largest purchasing areas economically in city of Helsingborg are presented

The municipality's waste management accounts for 1% of the purchasing budget. In order to reduce waste costs, we should create more circular solutions. One way to handle it is to distinguish the largest waste streams and find circular solutions for them along with players in and around Vera Park. Large waste streams in the municipality's operations are excavation masses, construction waste, food waste, sanitary waste, furniture, electronics, park waste, newspapers and books.

The municipality has a great opportunity to influence the market by advocating for circular solutions. Here are the most important purchasing areas to start with in terms of quantities and environmental impact.

Contract / operation and maintenance account for about 27% of the purchasing budget.

Circular solutions, for example:

- Avoid planning that entails large movements of masses, such as embankments, large roads, cellar garage.
- Promote that private garages and parking spaces can be rented part-time by the public in dense areas.
- Let the municipality's buildings be utilized around the clock, so that, for example, parts of schools can become meeting places on weekends or evenings.
- When planning, consider whether additional functions can be added in the same project. Can a gym get a climbing wall and solar cells for example.
- Request that planning be based on the excavation masses and materials already owned by the municipality and Vera park. The handling is done in accordance with advice and instructions from the Environment Department (MF).

- At demolition, try to reuse more material and excavation masses for other contracts.
- To coordinate transport and excavations.
- To buy functions, such as light instead of luminaires, so that the manufacturer owns and is responsible for the material

Electricity, heating, water make up 16% of the purchasing budget

Circular solutions, for example:

- Review electricity consumption for pumps and ventilation and other facilities
- Examine the houses and plants with a thermal camera.
- Install heat exchanger so that hot water can be used more than once
- Install smart grids so that temperature differences in the city and the storage capacity of land and houses can be better utilized.
- Install intelligent water meters
- Install water-efficient toilets and nozzles.
- Install solar cells
- Insulate windows that allow too much heat
- Install LED lighting and presence detectors

Food represents 3% of the purchasing budget

Circular solutions, for example

- Reduce food waste in all municipality owned kitchens
- Increase the proportion of locally produced food
- Reduce the proportion of meat
- Work to decrease sizes of such as coffee cups and coffee bread

IS/IT and technology Hardware represents 2% of the purchasing budget

Circular solutions, for example

- · Rent more hardware instead of owning it.
- Demand reconditioned products.
- Demand products designed for recycling.
- Make it easier to return hardware.
- Use sensors to locate non-returned loan computers.

Furnishings accounts for 1% of the purchasing budget

Circular solutions, for example:

- To request that the proposals from interior architects are based of furniture and materials that the municipality already owns.
- Reguest remanufactured and refurbished furnishings in the first place.
- Renting functions instead of owning, for example, candles, carpets, curtains, coffee machines, etc.

How to work as a contractor and employer to achieve the circular solutions within the Helsingborg Group

 We are participating in the EU project Circular Skåne to increase the circular solutions within the city's procurement and focus on the areas of purchasing that have the greatest impact.

Collaboration between Executive Management Office (SLF) purchases and other concerned departments and companies.

 Through targeted campaigns, we will increase the interest and knowledge of circular solutions among employees with purchasing responsibility.

Collaboration between: City Planning and Technical Services Department (SBF) and Executive Management Office (SLF).

 We will start pilot projects in Östra Ramlösa to create more circular solutions in the construction and civil engineering sector - and then work on teaching the Helsingborg Group to provide knowledge for upcoming construction projects.

Collaboration between Executive Management Office (SLF), City Planning and Technical Services Department (SBF), Property Management Department (FF) and construction companies.

• We will increase the collaboration by working on the municipality's own waste plan, the network for implementing the climate and energy plan, and the quality of life program, as well as the environmental group for the building departments and Helsingborg Group, to learn more about circular solutions.

Collaboration within existing networks and forums within the Helsingborg Group.

 We will hold breakfast meetings for people within the business sector with a theme in circular economy and sharing economy

Collaboration between Economic Development & Marketing (NOD), Executive Management Office (SLF) and companies with circular business models.

 We will continue to work on environmental adaptation and coordination of deliveries in a dense city, by using existing or developing our own digital services.

Collaboration between the Executive Management Office (SLF), City Management Administration, City Planning and Technical Services Department (SBF) the Port of Helsingborg and the relevant departments and companies within Helsingborg Group.

 We will start a development project to create mobility services in residential areas - and afterwards a learning organization that provides input for upcoming construction projects

Collaboration between Executive Management Office (SLF), City Planning and Technical Services Department (SBF) and Helsingborgshem

• We will give associations and residents even more opportunities to rent premises when the school and leisure or cultural departments do not use them

Collaboration between the Culture Department (KF), School and Youth Services Department (SFF) and Property Management Department (FF).

C. Measures that develop infrastructure and systems for waste management and waste prevention

• We will develop and test concepts for sustainable events with circular solutions towards H22.

Cooperation between NSR, Helsingborg Arena & Scen, City Planning and Technical Services Department (SBF), Executive Management Office (SLF) and others.

 We will collaborate with various actors to develop recycling services for Helsingborg citizens at times that generate a lot of bulky waste, for example during relocations, estates, spring cleaning and during Christmas.

Collaboration between NSR and several relevant departments and companies within Helsingborg Group.

• We will test to combine picking garbage with safety walks in different places in Helsingborg.

Collaboration between the Executive Management Office (SLF), City Planning and Technical Services Department (SBF) and Environment Department (MF).

 We will investigate the conditions for making parts of the business's environmental data searchable so that they can be used to reduce waste, increase the degree of resource exchange between companies and the industrial symbiosis in the city.

Collaboration between Executive Management Office (SLF) and Municipal Real Estate Office (MF).

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Appendix Current situation, spring 2020 20200303