

#ZeroWasteCities

# The Story of Munich

The city committed to go beyond recycling by developing a zero waste strategy focused on reuse and repair.





The City Of Munich has long been a leader for recycling within Europe, but in 2020, it announced its commitment to develop a strategy to guide its transition towards zero waste and a circular economy.

Its flagship reuse hub, Halle 2, not only repairs second-hand goods that would otherwise have become waste, but it also plays an active role within the community to bring local residents and stakeholders together to promote the circular economy.

In 2017, Halle 2 won the Eurocities Cooperation Award and today forms a central part of the City of Munich's sustainability agenda, preventing around 1,000 tonnes of waste each year.

## LOCAL CONTEXT

Since 1999, Munich has implemented a good waste management system and generates a low volume of waste for a city of its size and wealth.

In 2018, **54% of the collected waste was recycled** according to the German methodology, **above the 50% EU recycling target for 2020 with 365kg residual waste produced per capita**. Besides kerbside collection for paper, organic and residual waste at every building, there are also 960 bottle banks located around the city not only for glass but also for metals, plastics and used clothes, Munich's citizens also have the opportunity to bring their recyclables to one of the 12 recycling centres located in many districts, which recycle up to 30 different fractions.

In 2000, the **Waste Management Corporation Munich (AWM)** started its first second-hand store to achieve results beyond just recycling, with the aim of preventing waste by tackling the issue further up **the hierarchy** through "preparing for reuse".

Throughout the 2000s, AWM started installing special collection points at every recycling centre specifically for items which can be repaired which still have value and usage once repaired. These items were then repaired by local experts and subsequently sold in a second hand store called "Halle," which was located in an old car shed at the time. When the original location was about to be demolished, AWM saw a new vision for Halle. The result was a larger, better-equipped and more consumer-friendly store that would also act as a testbed for new ways to divert even more items away from waste and strengthen citizens' environmental awareness.

**In 2016, AWM opened a new second hand shop, "Halle 2," which is larger, better equipped and more customer friendly.**

## INTRODUCTION TO HALLE 2

**Halle 2 is a municipal-led second hand store combining circular economy principles with the aim of actively supporting sustainable lifestyles** by Munich's residents. By selling goods which are collected across the 12 Munich Recycling Centers and then repaired, Halle 2 extends the lifespan of useful everyday items that would otherwise have become waste. It has become a vital part and a flagship initiative in the broader waste prevention strategy implemented by the Waste Management Corporation Munich (AWM).

Halle 2 is located in a former shoe shop in central Munich, approximately 1440 square meters in size. Staff at the second hand store are all employed by AWM, whilst volunteers and local groups help organise repair cafes and other expert workshops. Its business model is based upon receiving donations from the local community whilst also offering a service to collect repairable items from within the city. Only dangerous and hazardous goods are not allowed at the shop.

The Waste Management Corporation Munich, which is owned by the municipality of Munich, has played a key role behind the city's progressive approach to waste reduction. Halle 2 is financed by AWM, with the €1 million EUR budget for renovating and marketing the center coming directly from the waste fee, paid to AWM by every Munich household for collecting and managing their waste.

**Halle 2 provides a good example on how to meaningfully engage with the local community and promote societal responsibility**, through its strong partnerships with several local non-profit organisations. Local companies together with AWM are helping to offer unemployed people qualifications and durable job perspectives. Furthermore, Halle 2 was designed to be a "reuse-lab" to act as an innovation testbed, helping develop new ways of increasing the number of reused items within the city, together with local businesses and other stakeholders.

The business model of Halle 2 is based on the following objectives:

- **Increasing the volume of materials that are collected** from the residents of Munich to reduce the volume of total waste generated.
- **Increasing the ease for Munich's residents to have access to second-hand products** that are valuable and remain in a good condition.
- **Creating** new and further **opportunities for broken items to be repaired**, preserving their value and therefore keeping them within the economy.
- **Establishing new lending and trading opportunities** to help both Halle 2 grow and extend the business opportunities of local enterprises.

The hub also hosts numerous repair cafés which act as training opportunities for local citizens, by sharing repair expertise and knowledge.

Across the city of Munich, there is a growing and flourishing scene of repair cafés, which often results in the problem of coordinating which cafe receives which items to repair and sell-on. This is why AWM decided not to run and organise a municipal repair café itself, but instead helps to implement a network between the already existed repair café across the city. This is partly behind the reason why **Halle 2** was born, to act as a **hub between repair cafes within the city, as well as a second-hand good store.**

Finally, Halle 2 also acts as a **joint learning platform** for the city, providing data to help improve the processes of waste collection, as well as the continued evaluation on the development of local reuse systems.

Through its activities, Halle 2 ultimately plays a key role in supporting the city of Munich to convince its citizens to act more environmentally and resource friendly within their daily lives, by **increasing awareness and access to the ability to reuse, repair, and recycle their items.**

## THE VISION DRIVING HALLE 2 FORWARD

### **Increasing circularity and preventing waste**

Ultimately, the main goal is to reduce the amount of waste in Munich by repairing and reselling useful items to its citizens. Due to successful information campaigns and a strong cooperation with local recycling companies, the amount of resold items should double in the coming years, compared to the first few years since Halle 2 has been operating.

### **Increasing community interaction and cohesion**

Halle 2 not only offers Munich's citizens valuable second-hand products at an affordable price,

but it is also used as a “reuse-lab” where AWM has created a knowledge platform for reuse ideas to flourish within the city. These include testing new awareness campaigns and methods to improve public relations, establishing repair cafés within the city, connecting stakeholders working within the “sharing economy”, providing a space for upcycling workshops to increase local knowledge on how to prevent waste further and finally, presenting a number of cultural events for citizens to attend, such as fine art exhibitions, music performances, science conferences, lectures and many more.



Picture 1 and 2: Halle 2 - Waste Management Corporation Munich (AWM)

### Increasing job perspectives

Halle 2 wants to increase the job perspectives and chances of special target groups within the local community, such as the young (16-24 year old) or those in long-term unemployment. This will be done through the provision of qualifications and training organised by the social enterprises that Halle 2

partners with, connecting participants with local businesses who want to find potential new employees. Often these individuals gain an entry level qualification as a mechanic, using their expertise to find work in such fields as repairing bicycles and electronic devices.



“The philosophy of AWM is to be an enabler in the engagement of citizens within the circular economy”

Günther Langer, Head of Executives Office, AWM

## COMMUNITY LED REPAIR CAFES

The service that Halle 2 provides as a repair café provides local citizens with a space and room to organise voluntary activities and/or as a place to exchange knowledge on different circular initiatives. The repair cafe is hosted at Halle 2 but it is not run by AWM. It is organised by volunteers who use local organisations and experts to run the sessions that happen regularly throughout each month.

For example, technical experts are bought in to host workshops where they support local residents, who bring a bicycle or an old radio which is in need of repair, and provide them advice on how to fix their items. This is a service that is completely free of charge to residents, but it is expected that the clients donate something small to one of Munich's social care institutions.



## CONNECTING WITH LOCAL ENTERPRISES & STAKEHOLDERS

The Munich Department for Labour and Economic Development has integrated a network of social companies into its employment and qualification programme. These companies implement local employment enhancing initiatives, often supported by European Social Funds. **The Waste Management Corporation Munich has made use of this network and has established cooperation agreements with several of these enterprises.**

The companies AWM partners with are designed **to facilitate the integration of specific target groups into employment**, such as those who continue to face discrimination and barriers to entering the local labour market. The AWM is responsible for the collection of used goods and delivers them to companies within the network, who then prepare them for resale.



Picture 3:Halle 2 - Waste Management Corporation Munich (AWM)



AWM uses its platform with Halle 2 to facilitate greater connection and collaboration between local stakeholders, helping prevent waste and create a more circular economy in the follow areas:

**WEEE:** The city is cooperating with social enterprises "[Weißer Rabe](#)", "[ConDrops](#)" and "[AnderWerk](#)" to check the used electronic devices and to evaluate whether repairs are possible on each electronic item Halle 2 receives, before they put on sale in the shop. Each company is responsible for security checks and capturing data on each item it receives to ensure the safety and traceability of their repairs. Partnering with these companies is a strong benefit of the reuse hub, as the focus of these social companies are on integrating unemployed people back into the labour market.

**Bicycles:** The social company "[Werkstätte für Zweiradmechanik](#)" offers young unemployed people the opportunity to participate in vocational training. The company checks the bicycles they receive, repairs them and, if necessary, uses parts of non-repairable bikes as spare. The company sells the repaired bicycles in its own shop but is obliged to sell a certain amount at Halle 2.

**Textiles:** The social company "[Nähwerk](#)" is responsible for the reuse of old clothes. They are a cooperation partner of the catholic institution Caritas, which has introduced the nationwide label "Einzigware". Einzigware is a fashion label which successfully distributes upcycled clothes. Clothes received and donated to AWM are then given to Nähwerk who prepare them for reuse and re-sale. The Einzigware label is increasingly seen as something trendy within the city and helps provide an incentive for citizens to increasingly use second hand items.

**Catering:** The non-profit organisation "[Regenbogen Arbeit](#)" offers catering and beverages for the events in Halle 2. The organisation gives work opportunities to individuals within the community who struggle to find work or have been unemployed for a long time.

Furthermore, to connect more deeply with the local community, Halle 2 offers Munich educational institutions (like Environmental Academy Munich) an event space which they can use for free to host seminars/workshops on circular economy topics, such as the promotion of zero waste lifestyles. Schools in Munich that offer vocational training are now also cooperating with students of the Social Entrepreneurship Academy. Together, they are organising a 'maker space' for residents interested in designing and developing upcycled products. Halle 2 specifically offers a showroom where upcycled products are exhibited, in order to help showcase the benefits of upcycling and to motivate others to follow suit.

The space is also used to host exhibitions for Munich artists working in the field of reuse and waste prevention. AWM also organises cultural lectures and events to further promote awareness and understanding on the circular economy. These range from second hand book fairs, poetry slams about waste, "second hand records disco", guided art tours on "second hand art" and many more. Every Saturday, AWM organizes auctions of second hand goods that act not only as a space to buy valuable goods, but also as a social event for local citizens and businesses.



Picture 4: Waste Management Corporation Munich (AWM)

## IMPACT OF COVID-19

The COVID-19 pandemic has unfortunately prevented these events from happening in person at Halle 2, including the organisation of repair café's. However, the aim is that once the social restrictions have eased in Munich, these events and activities will continue once again. **Despite the pandemic, AWM has continued to cooperate regularly with the partner social enterprises during this crisis.** Furthermore, existing plans have been adapted to continue through the challenging times. For example, the actions organised for second-hand items are held via social media, as there are restrictions in place regarding the number of customers in Halle 2.

**The strength of Halle 2 is based upon being not only just a second hand store, but also the systemic partnership and cooperation it has with Munich's community.** The model of success for Halle 2 is found in its cooperation with local initiatives ,which help to both enrich and stimulate greater awareness of the circular economy locally, as well as helping to support local businesses working in reuse, repair, redesign sectors.



Picture 6 - Waste Management Corporation Munich (AWM)



## FURTHER RESOURCES TO ENCOURAGE REUSE & REPAIR

The day-to-day activities of Halle 2 forms only one part of AWM's broader strategy aimed at increasing the lifespan of products used locally. Recognising the need to implement solutions that prevent waste from being generated in the first place, AWM supplements the activities of Halle 2 by providing a number of online resources that have been designed to support local residents reuse and repair more of their old items.

These resources include:

- [A "repair guide" that provides a list of available businesses or repair cafes which will help fix broken items.](#)
- [A detailed list and contact information of the different local repair cafes and initiatives.](#)
- [A second-hand guide that includes tips on how to sell previously owned items and an overview of existing second-hand initiatives where citizens can donate or buy second hand items.](#)
- [A 'rental' guide for citizens who want to search for items and locations where they can rent products rather than having to buy them, helping to increase awareness and uptake in the local sharing economy.](#)

## CHALLENGES & KEY LEARNINGS

In the highly densely populated city of Munich, **the main challenge at the start was to find an affordable location for Halle 2 to be based in.** AWM wanted to find a central location with enough space that was reachable for most of Munich's citizens. They also set key requirements that the venue was accessible for all and offered various possibilities for different concepts, events and ideas that local stakeholders could use the hub for. In the end, Halle 2 was located on the premises of a former shoe shop, just a couple of kilometers outside the city center, accessible easily by car or bus for those not living in the area. AWM is considering the possibility of opening another location similar to Halle 2 on the east side of the city, but again the challenge remains finding a suitable and affordable location.

Secondly, **the city has spent a lot of resources advertising the services of Halle 2.** Due to the hub having to be located just outside the city centre, the subsequent costs for advertising and communicating with citizens so that they were aware of the services available at Halle 2 have been quite high. AWM recognises the importance of attracting citizens' attention in order to reach a wider

segment of the population, helping increase both the likelihood of sales and revenue for the shop, as well as building awareness from local citizens on the ability and importance of reusing goods. As the center is not only a second hand shop, but also organises repair cafés and seminars on sustainable lifestyles, there are many activities which aim at including a larger group of potential customers and therefore require more communication costs.

A third challenge that AWM came across was the **initial investment** needed for these kinds of reuse and resource centers, specifically the need for this investment to receive political support. As the main objective of AWM, which is a public company, is to ultimately handle waste effectively, any fees that are spent on measures to reduce waste need to be verified by local elected politicians.

As long as the operation costs of such initiatives continue to outweigh the revenue, investments must be measured before receiving the green light from politicians.

As this often limits or slows down the ability to implement these kinds of initiatives, AWM organised the Halle 2 project to be economically sustainable in the long run, though

a business model that received revenue and made a profit from its activities.

## SUCCESS AND IMPACT

Since 2000, the population of the city has grown from just over 1.2 million to now 1.5 million inhabitants. Yet during this time, **the volume of waste has not increased** at the same rate, providing evidence that the City's broader waste management policy has been successful. **In 2018, AWM recorded the city's recycling rate to be 54.5%**, based upon the previous German calculation methodology which differs from the new EU methodology required to be used for the 2025 targets and beyond.

The success of Halle 2 can also be measured in the **increased turnover at the store**. In 2016, the monthly income was 51,877 Euro, which rose to 56,756 Euro in 2019, resulting in just under an extra 60,000 Euros each year. AWM calculates around 1,000 tonnes of items are reused or repaired at Halle 2 each year.

The team behind Halle 2 remains very driven and has set ambitious targets for the next three years.

These include aiming to grow monthly sales from €50,000 to €90,000 and the number of items sold each month from 14,000 to 24,000.

Halle 2 has agreements with 11 cooperation partners, giving it the ability to recruit and train more people and therefore helping to build confidence in the ability to continually generate revenue into the future. In the first couple of years after opening, it has sent approximately 3,600 electronic devices for checking, making €50,000 from their sale, and sold a total of 3,250 items, which generated €350,000 of revenue.



In a survey conducted at the time, customers gave Halle 2 a 90% rating for quality of goods and 98% for the store's staff.

Halle 2 has on average 270 visitors per day just to the shop, not including external events or workshops organised that day. Since it opened, **AWM has created 10 new jobs at Halle 2 for local residents,** whilst also providing training and qualifications for numerous other local individuals. AWM is proud of the significant contribution Halle 2 has played in raising awareness on the importance of local citizens reducing their waste, specifically through the repair and reuse of second hand items. One of the key ways it does this is by providing a 'testbed' for developing and testing new ways to increase the number of reused items, as well as innovative ways to partner with local businesses.

AWM aims to double the volume of items it sells in the coming years. They aim to achieve this by running more detailed and targeted information campaigns and through stronger cooperation with local

companies, with the aim of eventually being able to generate enough revenue from sales to cover the annual costs of managing Halle 2, which is approximately €900,000 for rent and staff.

Plans for the future include training citizens and companies to help increase awareness and practical knowledge on waste prevention, a city-wide waste prevention campaign and ideas to introduce new services at Halle 2 such as the hire of tools. As mentioned before, AWM is hoping to identify a new location to open a 'second' Halle 2 chain store in another district of the city.

Recognising the impact the centre has had in terms of waste reduction and generating more social cohesion within the city of Munich, **in 2017 Halle 2 won the EUROCITIES Cooperation Award.**

## COMMITMENT TO BECOME ZERO WASTE

On 2nd July 2020, a resolution titled "Circular Munich - Circular Economy for a sustainable Munich" was formally passed by the City Council.

The resolution maps out a framework for which Munich can develop its zero waste concept and a strategy for implementing the circular economy within the city. It combines the ideas of various previous city council proposals and reports on the status of implementation of the Circular Economy in Europe and Germany.

The overall strategy includes many different aspects. The 4 key themes were identified:

- Sustainable public procurement implemented by all public authorities.
- Reducing the volume of waste generated in urban facilities and spaces (using the positive examples of reuse that exist already, such as Oktoberfest).
- Targeting consumer behaviour to reduce plastic through greater support for packaging-free businesses.
- Encouraging large chains to reduce single-use items, through creation of a city-wide quality label.

The resolution provided AWM with a mandate to develop the first steps for the implementation of a circular economy and zero waste strategy, which will be done in close cooperation with all urban departments, institutions, organizations and stakeholders in urban society. Zero Waste Europe is continuing its discussions with Munich officials and AWM to hopefully welcome the city into the Zero Waste Cities programme.



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Pictures: AWM Cooperation, Munich



Zero Waste Europe is the European network of communities, local leaders, experts and change agents working towards the elimination of waste in our society. We empower communities to redesign their relationship with resources, and to adopt smarter lifestyles and sustainable consumption patterns in line with a circular economy.



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