Cities and the Circular Economy

Milano Circolare 2024
29 February 2024

Simon Gresset, ICLEI Europe

About ICLEI

- ICLEI is a global network of **more than 2,500 local and regional governments** committed to **sustainable urban development**.

  - **ICLEI's European Secretariat**: **160+ members**, from **33+ countries**.

  - Based in Freiburg, Germany.

- We influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and **circular development**.

ICLEI on Circular Economy

ICLEI — Local Governments for Sustainability — EUROPE

Across projects and initiatives, ICLEI Europe **shares knowledge, create connections and provide support to local and regional authorities** committed to the circular transition across Europe.

PROJECTS

13 EU-FUNDED PROJECTS, SUPPORTING THE **CIRCULAR TRANSITION** IN **25**+ EUROPEAN CITIES
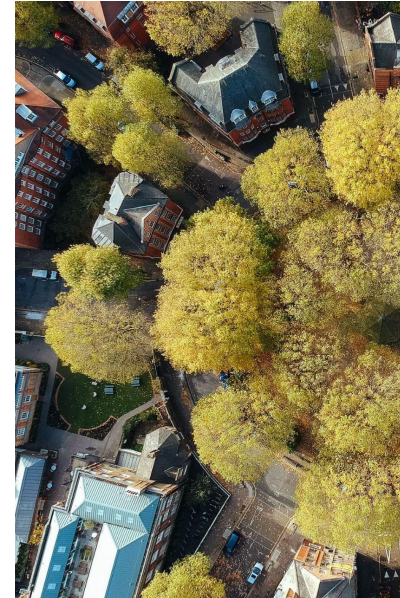
THE RESULTS WILL BE **REPLICATED** IN **17**+ REPLICATION CITIES THROUGHOUT EUROPE

INITIATIVES

80+ SIGNATORY CITIES OF THE CIRCULAR CITIES DECLARATION, ENCOMPASSING **~16** MILLION INHABITANTS

CIRCULARCITIES DECLARATION

Circular Cities & Regions Initiative
ASSOCIATED PARTNER

Milano Circolare: Cities and the Circular Economy

The Circular Cities Declaration

The **European Circular Cities Declaration (CCD)** is a **commitment document** which **local and regional governments** across Europe can sign to help **accelerate the transition from a linear to a circular economy** in Europe.

Developed and managed by a broad group of Support Partners:

[Download the Declaration](#)

- **80 signatories** from **22 countries**.

- Committed to deploying all **levers at their disposal** for advancing the circularity agenda.

- Signalling a clear political commitment in the **European arena**.

- **Sharing** experiences and best practices:
    - [Webinars](#)
    - Annual reporting

The CCD Report 2024

54 reporting cities from **18 countries**.
Encompassing more than **16 million inhabitants**.

Reporting on their **circular strategies** and **actions**.
Deep dives on **measuring progress** and **regenerate nature**.

Authors: **ICLEI Europe**, **Ellen MacArthur Foundation** and **Circle Economy**.
Release date: **March 2024**

Read the CCD Report 2022 here

Belgium	Hungary	Loures
Bruges	Budapest	Mangualde
Ghent	**Ireland**	Matosinhos
Leuven	Fingal	Porto
Liège	**Italy**	Torres Vedras
Mechelen	Florence	Valongo
Temse	Genoa	**Slovenia**
Denmark	La Spezia	Ljubljana
Capital Region Denmark	**Luxembourg**	Maribor
Copenhagen	Esch-sur-Alzette	**Spain**
Høje-Taastrup	Wiltz	Manresa
Finland	**Netherlands**	Rivas Vaciamadrid
Espoo	Haarlem	Valladolid
Helsinki	Rotterdam	Vallès Occidental
Lappeenranta	**Norway**	**Sweden**
Mikkeli	Bergen	Eskilstuna
Oulu	Bodø	Malmö
Tampere	Oslo	**Switzerland**
Turku	**Portugal**	Zürich
France	Águeda	**Turkey**
Est Ensemble Grand Paris	Albergaria-a-Velha	Izmit
Germany	Braga	**United Kingdom**
Frankfurt am Main	Évora	Glasgow
Freiburg im Breisgau	Guimarães	London Borough of Newham

Key takeaways

- Circular economy is necessary to **achieve climate neutrality** and more generally to stay within planetary boundaries.

- Cities have a **crucial role to play** and a variety of lever to pull to implement circularity.

- Cities are **at the forefront of the circular transition** and are implementing projects and actions in different value chains, including textile, fashion and consumer goods.

- The **Circular Cities Declaration** brings together 80+ cities committed to the circular transition.

The circular transition

The Linear Economy

Our over-consuming world…

- **Global resource extraction** = 100 billion tonnes per year (over 12 tonnes per person)
  - Doubled since 2000
  - Expected to almost double again by 2060 (190 billion tonnes

- **EU generation of waste** = 2.2 billion tonnes per year - 27% municipal waste

  - Recycling and composting *slowly* increasing (nearly 50% in 2021)

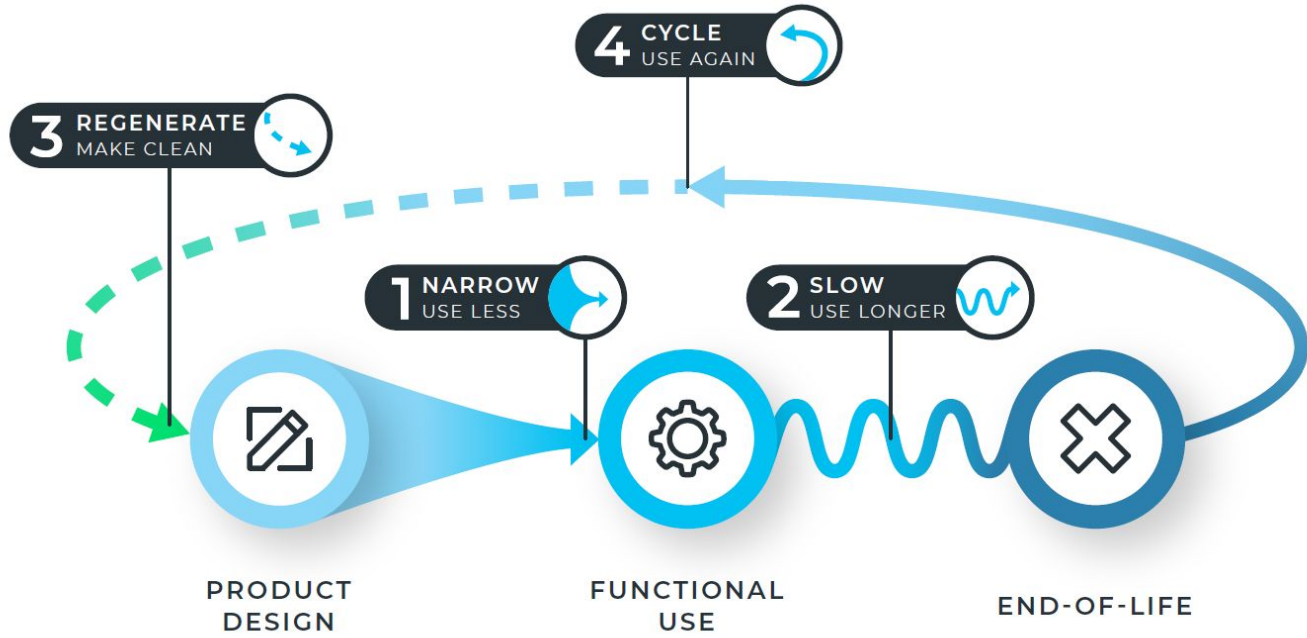 - Nearly 20% of waste still landfilled (2020)

…is unsustainable

- The way we **make, use, and dispose** of products and foods accounts for…
  - **50% of global GHG** emissions.
  - **90% biodiversity loss**.

Need to decouple resource consumption from **economic growth**.

The Circular Transition

Circle Economy – Circularity Gap Report 2023

Circular economy and cities

2/3 OF GLOBAL ENERGY DEMAND

50% OF GLOBAL WASTE POLLUTION

85% OF EUROPEAN POPULATION BY 2050

EMIT 60-80% OF GLOBAL GHG

OVER 50% OF SOLID WASTE PRODUCTION

OVER 75% OF NATURAL RESOURCES CONSUMPTION

ADDITIONALLY, CITIES NEED TO BE COMPLIANT WITH EUROPEAN TARGETS AND REGULATIONS (E.G., WASTE DIRECTIVE, LANDFILL DIRECTIVE)
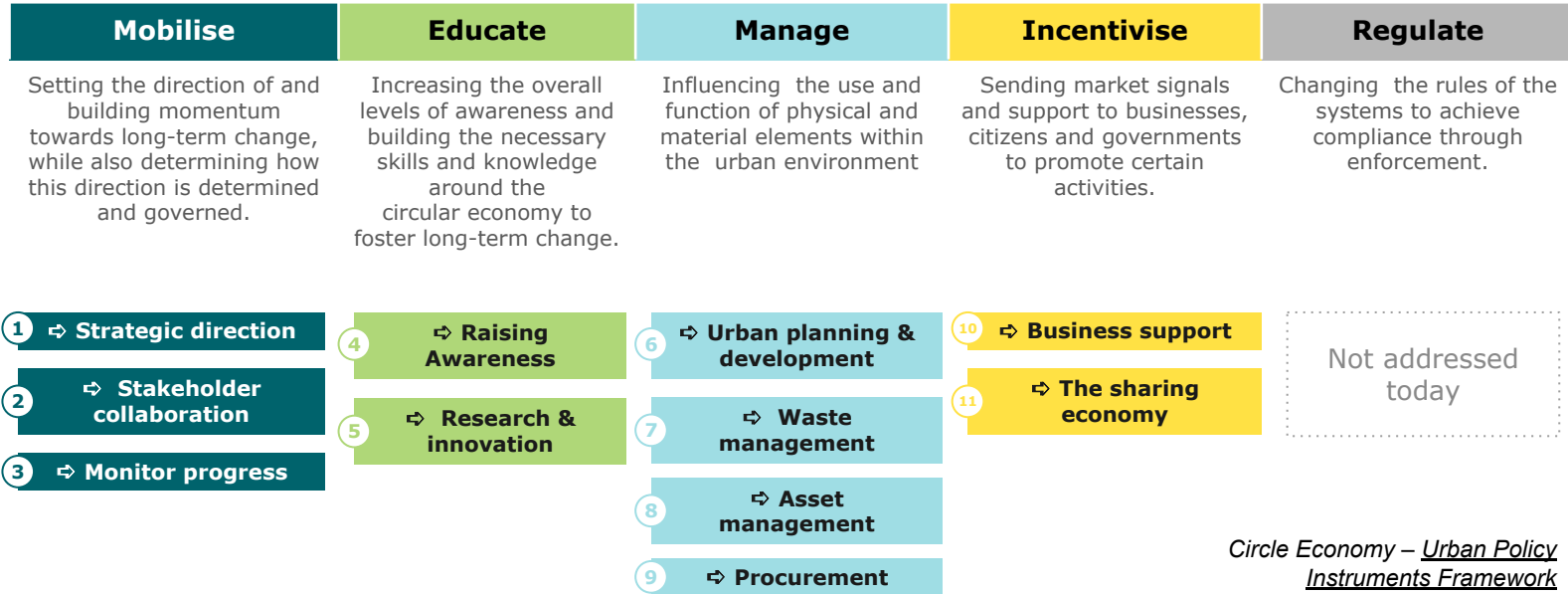
How do cities benefit?

- **Minimise environmental footprint** – Reducing global GHG emissions and other air pollutants, minimising biodiversity loss, reducing waste generation and resource extraction.

- **Job creation and development** – Providing new local business opportunities and employment in the repair, reuse, repurposing, recycling and circular design.

- **Resilience** – Reduce dependence on global supply chains, and boost resilience to price and supply shocks.

- **Social justice** – Promoting a sharing, collaborative and inclusive regional economy.

- **Regulatory compliance** – Ensure compliance with current and future legislation.

What can cities do?

What can cities do?

Mobilise	Educate	Manage	Incentivise	Regulate
Setting the direction of and building momentum towards long-term change, while also determining how this direction is determined and governed.	Increasing the overall levels of awareness and building the necessary skills and knowledge around the circular economy to foster long-term change.	Influencing the use and function of physical and material elements within the urban environment	Sending market signals and support to businesses, citizens and governments to promote certain activities.	Changing the rules of the systems to achieve compliance through enforcement.

1 ⇨ **Strategic direction**

2 ⇨ **Stakeholder collaboration**

3 ⇨ **Monitor progress**

4 ⇨ **Raising Awareness**

5 ⇨ **Research & innovation**

6 ⇨ **Urban planning & development**

7 ⇨ **Waste management**

8 ⇨ **Asset management**

9 ⇨ **Procurement**

10 ⇨ **Business support**

11 ⇨ **The sharing economy**

Not addressed today

Circle Economy – Urban Policy Instruments Framework

Milano Circolare: Cities and the Circular Economy

(1) **Strategic direction**

Establish clear circular economy goals and strategies - to give a common direction of travel

- Develop a clear local circular economy strategy/action plan, in close collaboration with all relevant stakeholders

- Ensure clear (ideally quantifiable) goals, responsibilities and actions are established

Prato's Circular City Strategy

Prato Circular City aims to **accelerate the transition to a circular economy**, promoting sustainable practices at the city level. It emphasizes **innovation**, **regeneration**, and **social cohesion**, addressing barriers through better regulation, funding, and knowledge-sharing to achieve **sustainable development goals**.

The **textile industry** is **pivotal** in Prato's circular strategy, the city being **Europe's largest textile center** and a global leader in wool yarn and fabric production. Applying circular economy principles to the textile supply chain has **fostered innovation** and **beneficial symbiotic relationships**.

Prato Circular City

② Stakeholder collaboration

Convene key stakeholders to collaborate on the implementation of circular solutions

- Identify stakeholders from the public and private sectors, as well as civil society and the research community, for different material streams

- Organise collaboration activities, such as working groups, hackathons, aiming to align goals, identify opportunities and barriers to circularity, and develop joint strategies

- Establish Local Green Deals as a blueprint for common action

The Circular Glasgow Network - Convening a group of changemakers

The objective is to unite entrepreneurs, innovators, and enthusiasts of the circular economy, fostering connections, collaboration, and knowledge sharing toward achieving net-zero targets. Presently, Glasgow boasts a **community of approximately 300 businesses** actively advocating for and advancing the circular economy movement.

Circular Glasgow

Circular Glasgow

② Stakeholder collaboration

Convene key stakeholders to collaborate on the implementation of circular solutions (ii)

GK Green Fashion Cluster - **Establishing a joint vision for sustainable fashion in Gipuzkoa**

The GK Green Fashion Cluster **brings together multiple stakeholders** in the **fashion industry** in the province of Gipuzkoa, **united by a circular vision** and **led by the provincial council**. This includes producers, non-profit organizations, and research companies.

The Cluster has **produced a Strategic Plan** and conducted **research on fashion consumption habits in the territory**.

Multiple joint awareness raising events and research and development projects have been developed.

GK Green Fashion Cluster

③ Monitor progress

Establish performance indicators and mechanisms for monitoring progress

- Establish a set of indicators to be regularly monitored to establish progress towards circularity

- Link indicators with specific local policies and goals to demonstrate impact

- Engage with relevant internal departments, service provides, data controllers, to help optimise strategies for data collection
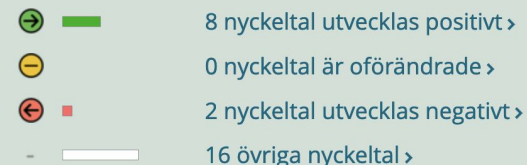
Så utvecklas nyckeltalen

Sammanställning av trender

8 nyckeltal utvecklas positivt ›

0 nyckeltal är oförändrade ›

2 nyckeltal utvecklas negativt ›

16 övriga nyckeltal ›

Screenshot of the
Miljöbarometern website

Malmö's environmental barometer

Malmö adopts a holistic, data-oriented strategy for sustainability planning. Utilizing the **Miljöbarometern tool**, the city **monitors various indicators annually**, including the management of **circular services like food and furniture procurement**.

Additionally, Malmö collaborates with research partners to **conduct material flow analyses** in **specific value chains**, enhancing baseline understanding and assessing private sector impacts for informed updates to its circular roadmap.

(4) Raising awareness

Implement awareness raising campaigns and capacity building schemes for citizens and businesses

- Develop (or copy!) information campaigns to promote circular behaviour amongst citizens and businesses, such as effective waste separation, circular lifestyles, or repair services

- Offer training and workshops to interested businesses on developing circular business practices

A wide array of awareness raising and capacity building initiatives in Liège

The city has undertaken several initiatives to raise **citizen** awareness and **promote reuse** and **second-hand practices**. These efforts encompass a [Zero Waste competition](#), awareness booths, and **communication campaigns** highlighting **second-hand initiatives** and **Repair Cafés**.

For **businesses**, the [Entreprendre Durable](#) web platform **provides advice** on how to become more sustainable and circular.

Awareness raising in Liège
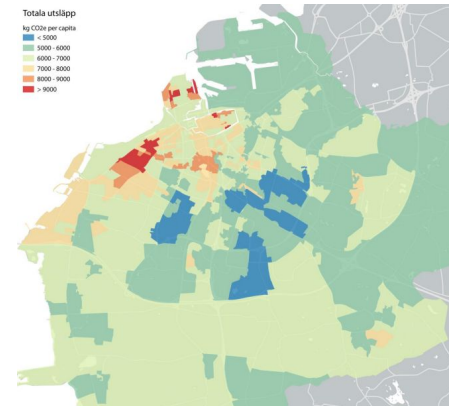
⑤ Research & innovation

Advance the circular agenda by testing and implementing innovative approaches

- Actively intervene in urban systems by ideating, testing, and implementing novel methods, processes and solutions

- Work closely with research institutions, universities, innovators, and practitioners to generate new knowledge

Mapping consumption-based emissions in Malmö

In partnership with the Stockholm Environment Institute, Malmö City has conducted a thorough mapping of consumption-based emissions. This initiative aims to **understand the environmental impacts driven by consumption**. The city is working towards reducing consumption-based greenhouse gas emissions to 3.1 tons per citizen by 2030, with the **circular economy playing a pivotal role** in achieving this goal. Ultimately, the aim is to foster **more sustainable consumption patterns**.

Consumption-based emissions in Malmö's districts

⑤ Research & innovation

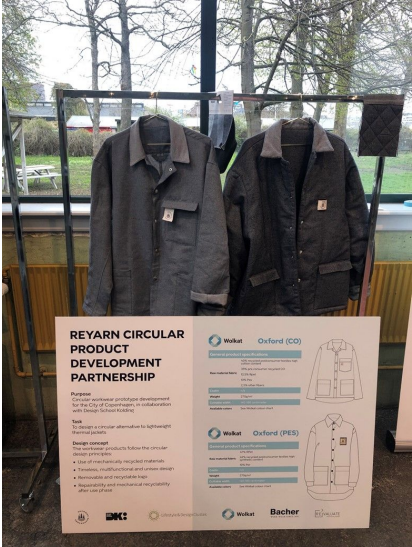*Advance the circular agenda by testing and implementing innovative approaches*

Circular Copenhagen Innovation Platform - **Copenhagen innovates**

The **municipality-owned** and **municipally operated** Circular Copenhagen Innovation Platform collaborates closely with innovative companies and knowledge institutions to **develop circular solutions** for waste and resource challenges.

An example is the **ReYarn project** (2021-2022), which focused on **municipal post-consumer textiles**. It involved key stakeholders such as the CCIP, businesses, charities, and Design School students.

The project **tested a local textile sorting system** for garment re-use and mechanical recycling, fostering **new product development** (e.g., workwear for municipal staff and consumer goods like pillows).

Additionally, the municipality promoted the **uptake of workwear made from recycled fibers** through **procurement**.

ReYarn project from CCIP

⑥ Urban planning & development

Integrate circularity into urban planning, to create an urban environment which encourages circular behaviour

- Link planning applications & building permits to compliance with circular criteria

- Target the creation of circular districts, which enable a "circular lifestyle"

- Make land available for CE support actions, such as material hubs

Center Rog - Ljubljana's creative hub

Creative hub providing an **environment for innovative projects** for **sustainable**, **circular**, and **socially responsible development** in the areas of **manufacturing**, urban handicraft, applied arts, **design**, and architecture.

Know   more:
Today, 15:00 Meta Štular, Director of Strategic Development and Programmes of Center Rog

Center Rog

⑥ Urban planning & development

Integrate circularity into urban planning, to create an urban environment which encourages circular behaviour (ii)

Maakleerplek - A maker space in Leuven's old Vaartkom industrial center

Run by the Municipality, Maakleerplek is a ecosystem where companies, schools and citizens can **make things together**, **exchange knowledge** and **share materials**. It features various labs, a coworking space, and multiple tool libraries.

Citizens can have their clothes repaired at the **textile repair hub**, which provides employment for people at distance from the labor market.

The **textile lab** welcomes citizens interested in dealing with textiles in a sustainable way. Besides being a space for creation and reuse, workshops and swapping activities are also organised.

Maakleerplek

⑦ Waste management

Establish a waste management infrastructure which maximises the collection and sorting of waste

- Establish separate collection systems for different waste fractions

- Encourage the development of sorting, recycling and valorisation infrastructure, such as biorefineries, automated sorting facilities

- Facilitate sharing of information on available waste streams/byproducts to encourage industrial urban symbiosis (I-US)

Separate collection of textiles in Oulu

A sound **separate collection scheme for textiles** is in place in Oulu. The local utility company Kiertokaari Oy collects **10,000 kg of discarded textiles monthly**.

A thorough **sorting process** allows for: **1) reusing fibers** as raw materials, **2) repairing** garments, or **3)** directly **reselling** items. Targeting residents seeking sustainable clothing options, this action **reduces textile waste** and **virgin material use**.
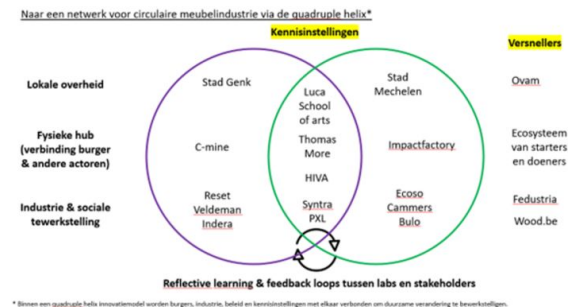

Kiertokaari Oy

⑦ Waste management

Establish a waste management infrastructure which maximises the collection and sorting of waste (ii)

TransFormMaker - Fostering I-US in the furniture sector in Mechelen

The TransFormMaker **living lab** aims to make furniture production more sustainable by developing a **network of furniture-making regions** that will **circulate raw materials** and generate social employment in Flanders. The project is coordinated by the Agency for Innovation & Entrepreneurship of Flanders, while the City of Mechelen is a project partner.

The projects includes the **mapping of residual flows**, including wood, textiles, foam, plastics, and metal, across production and construction companies or larger organisations, in order to **close material loops**.

TransFormMaker

⑧ Asset management

Promote circular practices within the management of buildings and other public assets

- Optimise the use of public buildings by, for example, enabling shared functions, or making vacant spaces available for circular initiatives

- Embed circular considerations in renovation works, for example, through flexible design or promoting secondary material use

Municipality of Eskilstuna

Repurposing furniture in Eskilstuna

The municipality has promoted the **internal reuse of furniture** and furnishings in the **construction of new schools** and **relocation of businesses**. Refurbishment is done by citizens, redesign companies an resellers of recycled furniture.

⑨ Procurement

Use public purchasing power to promote the market for circular products and services

- Establish specifications or award criteria in public tenders to give preference to circular products and services - for example by focusing on secondary material content, extended lifetime and reparability

- Provide a launch market for innovative products and services, for local SMEs

Helsinki's circular workwear procurement

The framework agreement for workwear at Palvelukeskus Helsinki became effective in 2022. Part of the **workwear used by the municipal service center** personnel is **acquired as a a rental service**, promoting the **longevity of products** and **enhancing recycling**. This includes attires for food service providers, care providers, and personnel from cleaning services.

Market dialogues with businesses were included as part of the procurement process.

Service Center Helsinki

Business support

Provide expert support and financial incentives to help businesses become circular, and start-ups to flourish

- Provide incubator services for circular start-ups and SMEs offering specialist business and finance advice, and potentially technical support

- Launch entrepreneurship contests for local businesses in response to local circularity challenges

- Offer financial support, such as subsidies or tax breaks to circular start-ups and SMEs

Grants for ecoinnovation & ecodesign projects in **Valladolid**

The municipality of Valladolid allocated €600,000 in 2019 to support projects promoting the **circular economy** and fostering **eco-innovation**, including the **design of sustainable products and goods**. The municipality **issued a call for grants** whereby each recipient could potentially receive funding of up to €25,000.

Eligible stakeholders had to be registered in Valladolid. These included private companies or consortia, non-profits, and research centers.

Stock image

Business support

Provide expert support and financial incentives to help businesses become circular, and start-ups to flourish (ii)

C-District Haarlem

C-District - Creating a ecosystem for circular businesses in Haarlem

Innovation hub that fosters collaborative projects around the circular economy **under the auspices of the Municipality of Haarlem**. This hub brings together businesses, governmental entities, and educational institutions to exchange knowledge and explore **innovative business activities and products** with an **environmental** and **social impact**.

The C-District also operates as a **testing ground for regional businesses** committed to the **reuse of residual flows**.

(11) The sharing economy

Facilitate exchange hubs, sharing platforms and repair

- Establish (or enable) physical circular hubs as a focal point for, for example, material exchanges, circular businesses, repair services

- Develop online platforms to allow for product sharing, material exchanges/marketplaces, and simple information on repair services, material collection centres etc.

- Promote easy and affordable access to repair services for consumer goods

Mapping sharing activities and offers in Freiburg

The City of Freiburg has developed the *Freiburg Shares* **web platform**, which aggregates an extensive **list of sharing services** available in the city, aiming to encourage **sustainable consumption**.

The offering is divided into various topical areas, including **books and media**, **mobility**, **food**, **tools and household goods**, **clothing**, **sport material**, and **events**.

> Bücher und Medien

> Mobilität

> Nahrungsmittel

Freiburg Shares
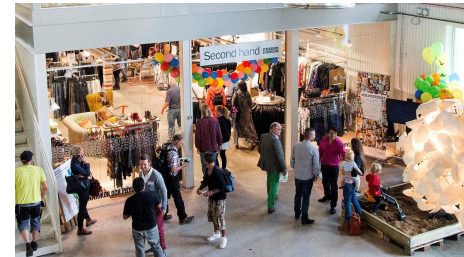
The sharing economy

Facilitate exchange hubs, sharing platforms and repair (ii)

ReTuna - The world's first Recycling Mall in Eskilstuna

ReTuna was established in 2015 as the world's first Recycling Mall. It is **run by the municipality-owned** Eskilstuna Energi och Miljö **utility company**.

The shops in the mall **refine, repair and convert old things into new things**, which they **then resell**.

The mall also features a **training facility** that offers a one-year **programme** on **circular design**: **Recycle Design Återbruk**.

ReTuna

City Challenges

- **Overcoming capacity and resource limitations** – finance, land, infrastructure, staff/skills

- **Securing political support and breaking down silos** – the need for integrated governance, cross-departmental collaboration, stakeholder engagement

- **Measuring circularity** – prioritising actions, measuring impact, demonstrating the link to other policy goals

- **Shifting the paradigm: Thinking circular in a linear system** – taxation, regulations, certification, and „business as usual" thinking

Source: Circular Cities Declaration Report 2022

Thank you!

Become a CCD signatory

🌐 iclei-europe.org   ▶ ICLEI_Europe   📷 @ICLEI_Europe

𝕏 @ICLEI_Europe   🎵 ICLEI_Europe   in @ICLEI Europe

Berlin office

Brussels office

European Secretariat

Join the Circular Cities Declaration and ICLEI

Signing the *Circular Cities Declaration*

- **The signature of the Declaration is free.**
- Any city or local authority wishing to adhere to the commitments of the Declaration is welcome to do so - there is no selection process.
- Signatories commit to working towards the 10 commitments.
- **The Declaration must be signed by an elected mayor/deputy mayor or equivalent.**
- Once you have decided to sign, the process is as follows:
    - Provide ICLEI with the name and title of the political representative.
    - ICLEI will prepare a tailored Declaration document for signing.
    - Once you have signed, we will ask you which contacts to include in the mailing list, as well as content for the website.
    - The organization will be added to the list of signatories, and the contacts will receive all future communications regarding CCD activities.

Please reach out at info@circularcitiesdeclaration.eu

Join ICLEI - Local Governments for Sustainability

Rejoignez ICLEI – Les gouvernements locaux pour le développement durable

Devenez leader en développement durable

ICLEI rassemble des collectivités locales et territoriales ambitieuses en Europe et dans le monde, offrant à ses membres des opportunités et avantages exclusifs.

More info here.

ICLEI is a leading network of local and regional authorities dedicated to sustainability.

- Joining ICLEI means:
  - Becoming part of a network
  - Making your voice heard
  - Being on the front lines
  - Learning and sharing experiences
  - Staying informed
  - Showcasing your achievements

- ICLEI is a democratic association where the strategy and actions are decided by its members. The annual membership fee is affordable and based on the population of the city or community and the gross national income per capita (up to €8,000/year for a city with over 4 million inhabitants).