# Municipal Waste Companies as Circular Enablers: The Renosyd Model

## Skanderborg & Odder, Denmark

Circular Cities & Regions Initiative
Communities of Practice

Funded by the European Union

# The Danish Waste Company That Built a Circular Economy Hub

### Sectors:

- Consumer Goods
- WEEE & Electronics
- Textiles
- Education

### Policy Instruments:

- Repair & Reuse Initiatives & Inclusive Community
- Engagement Programmes & Circular Literacy Programs

### Associated EU Policy/Strategy:

- EU Right-to-Repair
- WEEE Directive (2012/19/EU)
- EU Strategy for Sustainable and Circular Textiles

## Abstract

Renosyd has created a community-driven circular model that transforms the role of a municipal waste company into a facilitator of repair, reuse, and shared learning. Through *value centres*, citizens donate, exchange and find second-hand goods, while the on-site Repair Cafés, run with volunteers and local craftsmen, support the repair of textiles, electronics, tools and household items, achieving consistently high repair-success rates and extending product lifetimes. These activities visibly reduce waste flows and help shift local consumption habits. Renosyd's collaboration with schools embeds circular literacy in the next generation, while inclusive programmes ensure participation from vulnerable groups. The case demonstrates how municipalities can build social infrastructure that strengthens community cohesion, supports local skills, and delivers measurable circular outcomes far beyond traditional waste management.

## Time Frame

- **Værdicentralen Circularity Hub – ongoing**
  two locations established in 2015 and 2021
- **Repair Café activities at Renosyd**
  initiated around 2021 (ongoing)
- **School engagement programmes – ongoing**
  expanded significantly from 2015 onwards
- **Volunteer and craftsmen collaborations**
  developed iteratively since 2021 (ongoing)

## Stakeholders

- Skanderborg Municipality & Odder Municipality
- Værdicentralen (Reuse Hub)
- Repair Café Denmark (Local Volunteer Group)
- Schools and Educational Institutions
- Social Support Organisations

## Cost and Financing

- Circular economy activities are financed entirely through sales revenue from refurbished items.
- No external funding is used beyond initial EU start-up support.
- Initial funding from waste fees was needed at an early stage - hubs reach financial balance within around three years.
- Existing or rented facilities and second-hand furniture keep investment costs low.
- Repair Cafés were integrated with minimal additional investment, supported mainly through donations.

# Contextual Background

Renosyd is an intermunicipal waste company serving the municipalities of Skanderborg and Odder in eastern Jutland. Their initiative reflects regional interest in environmental action and active citizen participation, while also aligning with wider European and national priorities.

At the European level, the initiative responds to the waste-prevention objectives of the EU Circular Economy Action Plan and the Waste Framework Directive. It also supports the emerging Right-to-Repair agenda, which seeks to make the repair of consumer goods more accessible and rewarding for consumers.

At national level, the initiative contributes to Denmark's national strategy for waste prevention and circular economy, which places growing emphasis on strengthening reuse markets, enabling repair, fostering behavioural change, and involving citizens directly in circular practices. Both municipalities have integrated circularity, climate action, social inclusion, and community engagement into their local sustainability agendas, creating a supportive political environment for Renosyd's work. Such combination of local and national support has helped Renosyd evolve from a traditional waste operator into a facilitator of community-driven circularity, repair culture, and hands-on climate engagement.

# Vision, Objectives, and First Steps

Renosyd's long term vision seeks to redefine the role of citizens, from waste generators to active participants of a circular society. By integrating repair, sharing, and reuse into daily life, the initiative promotes a culture where environmental responsibility and social cohesion reinforce each other. Its aim is to make circularity more than a technical efficiency gain and turn it into an inclusive, accessible, and rewarding civic practice.

To trigger collective action, Renosyd brings together municipalities, volunteers, local craftsmen, schools, and social organisations in shared spaces, such as Værdicentralen. The initiative began with a focus on accessibility and engagement, redesigning the reuse hub to make it more welcoming, testing repair cafés, integrating craftsmen into the model, and piloting school workshops focused on hands-on repair and circular learning. These early steps provided the basis for a citizen-centred circular system that continues to evolve.

*"We want circularity to be accessible for everyone, not just something you read about, but something you can experience with your own hands."*

*Jeppe Vestergaard, Renosyd*

# Implementation, Deployment, and Upscaling

Renosyd implemented its model gradually, learning from each step and with hands-on citizen engagement. The first step was to transform the former reuse area into Værdicentralen, a welcoming, organised space designed that makes reuse intuitive and appealing. Renosyd then partnered with Repair Café Denmark to host regular repair sessions on site. These sessions brought together volunteers, citizens, and local craftsmen, creating an active environment where people could repair textiles, small electronics and household items while learning repair skills.

Renosyd's team soon realised that community engagement and activation were quite labour-intensive tasks, with much of the efforts being "invisible". Volunteers required coordination, inclusive spaces for vulnerable groups require effort and planning, and craftsmen need structured collaboration. Keeping volunteers motivated and managing expectations also called for new approaches to communication, recognition and shared ownership, which Renosyd had to integrate into its operations.

Another challenge was cultural: not all citizens are ready to shift from convenience to circular behaviours. Renosyd addressed this by combining practical activities with social experiences, such as repairing together, learning in groups, involving schools, and embedding circularity into everyday community life. A key success factor consisted in creating an appealing, inviting space for citizens to stop by and take part in the activities.

This model's success also relied on political support local partnerships. Renosyd received strong backing from both municipalities, in line with Denmark's national emphasis on waste prevention. Meanwhile, at a local level, the development of partnerships with local craftsmen, schools, and social organisations, enabled by the accessible design of Værdicentralen, helped Renosyd create a fertile ground for participatory experimentation.

## Highlight

Renosyd's Repair Café shows how practical, hands-on repair becomes a gateway to deeper circular engagement. Citizens learn skills, repair everyday items, and share knowledge across generations. The space functions as both a repair workshop and a social hub, strengthening confidence, inclusion, and community cohesion while reducing avoidable waste.

Source: Renosyd

## Related Project

**Repair Cafe Denmark** is a non-profit organization that operates a network of volunteer-run repair initiatives across Denmark, currently present in 123 locations nationwide. Their primary mission is to teach people repair skills rather than simply fix items for free, aiming to reduce waste, change consumption patterns, and create knowledge about green transition through community engagement.

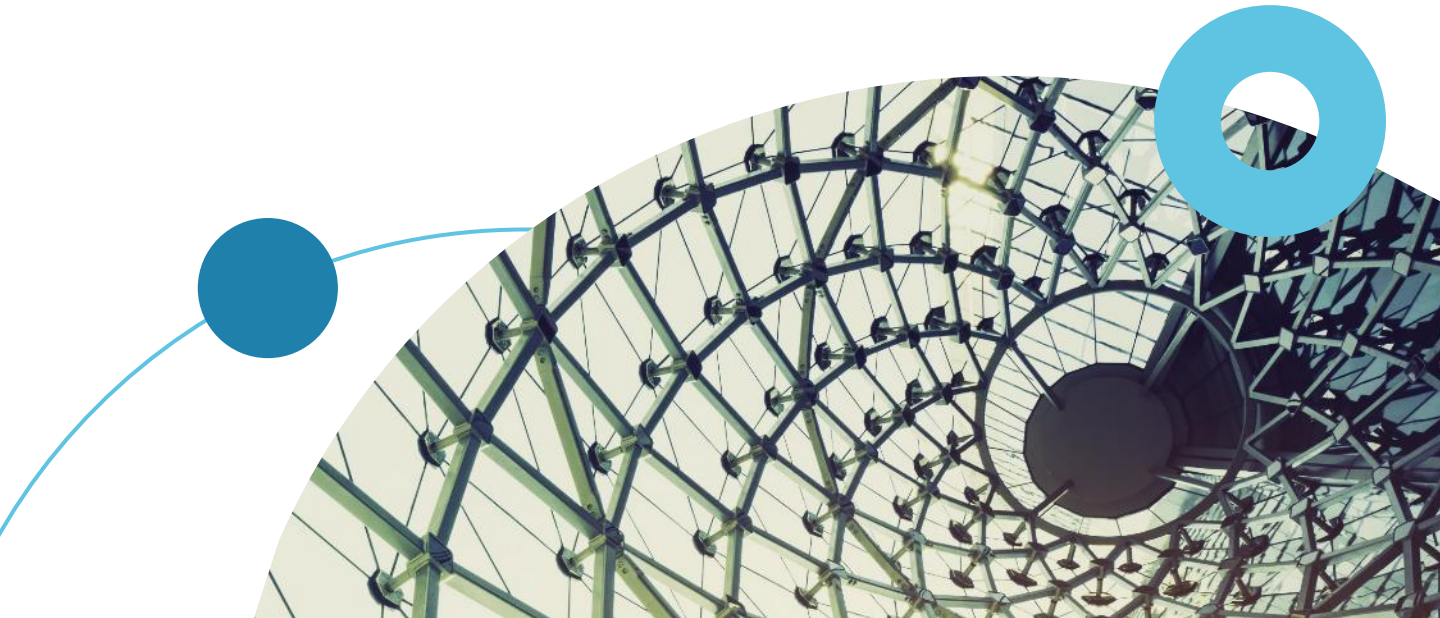
Project Link

# Results, Impact, and the Way Forward

Renosyd's model demonstrates how a municipal waste company can move beyond End-of-Life waste management and generate tangible circular and social impact by engaging citizens through reuse initiatives. Værdicentralen has made reuse noticeably more visible and accessible in the Skanderborg-Odder region, allowing citizens to donate, exchange, and access second-hand goods easily. On-site Repair Cafés have achieved high repair-success rates for textiles, electronics, tools and household items, extending product lifetimes and cutting unnecessary disposal. Hands-on workshops in local schools have also contributed to strengthening circular literacy, teaching future generations practical repair skills and raising awareness on the impacts associated with consumption.

The project's success is also rooted in a robust monitoring system. Værdicentralen systematically tracks the volume and quality of all incoming products and materials, recording daily recycling volumes and exchanged or donated items by category (such as textiles, furniture, and building materials). Such careful monitoring reveals usage patterns across different groups. The hubs welcome around 250 visitors every day, facilitated by 20 employees. Additionally, 16 volunteers open the repair café several times a month. The repair café repairs approximately 75 % of items brought in, with around 30 repairs conducted per month, mainly electronics and textiles. Although $CO_2$ savings from reused items are not yet quantified, the hubs actively monitor avoided disposal and waste reduction by tracking items successfully returned to use.

Looking ahead, Renosyd plans to improve impact data (including $CO_2$ savings), deepen collaborations with craftsmen and social partners, and expand the educational role of Værdicentralen. The company also aims to open more hubs, expanding the model to other neighbourhoods and introducing new repair or reuse activities. In this way, Renosyd is establishing itself as a regional leader in community-driven circularity, offering a model for other Danish municipalities to build resilient and socially inclusive circular networks.



Source: Renosyd

# Lessons Learned

- **Circular culture is built through participation**

Hands-on activities such as repair, reuse and community workshops create deeper engagement than awareness campaigns alone.

- **Spaces matter**

Inviting and organised spaces like Værdicentralen make circular behaviour collaborative, inclusive and rewarding.

- **Community activation requires continuity**

Volunteer coordination, facilitation and relationship-building are ongoing processes that demand stable staffing and consistent communication.

- **Circularity strengthens social value**

Working with schools, craftsmen and vulnerable groups demonstrates how reuse and repair can build confidence, skills and community cohesion.

- **Not all barriers can be resolved locally**

Lack of national incentives for repair, product design limitations, and behavioural norms remain structural challenges that municipalities cannot solve alone.

## General reflections

Community-centred approaches show that circularity is as much a social transition as a technical one. Municipalities can play a catalytic role by convening diverse actors and embedding circular practices into daily life.

## Main takeaway

Sustained, people-focused circular infrastructure can transform waste operators into facilitators of community belonging and engagement, shared learning and long-term behaviour change.

# Contact details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**More information:** Circular Cities and Regions Initiative website

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