



A Compendium of Small Scale Actions to Promote the Circular Transition in Cities



With thanks to all of the contributors. We especially want to thank the ULG members and the many city stakeholders. It is through their valuable inputs, energy, commitment and resourcefulness that positive change becomes possible.

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Introduction

In our current linear economic system we work on a take, make, waste basis. That is we take or harvest materials from the Earth, using them to make products to use and consume and when we don't want them anymore we throw them away as waste. This linear way in which products and services are currently produced, consumed and managed is entirely unsustainable. At our current rate of consumption we need 1.75 planets to provide the necessary resources and capacity to absorb our waste. By 2030 we will need two planets. Quite simply we are consuming our own future. This take-make-waste linear model of production and consumption is responsible for massive environmental destruction on a global scale, including over 80% of global biodiversity loss. With the majority of the global population residing in cities, they consume over 75% of global natural resources, they produce 50% of global waste and 3/4 of global greenhouse gas emissions. By simply throwing away our products as waste at the end of life we are destroying the very living systems we depend on for our survival, often harming already vulnerable people across the globe. When we throw away a product, we waste all those valuable resources, including energy, labour, knowledge and money that were invested in creating the product in the first place. What's more we also pay directly in waste disposal costs. But there is a solution - while cities drive consumption, they also have the potential to be agents of global change in terms of how we create, consume and manage our resources. Cities are big enough to make a difference and small enough to make it happen.

“Cities are big enough to make a difference and small enough to make it happen”

That is why our city partners have come together within the URBACT Resourceful Cities network. Through our actions we hope to inspire communities to recognise, retain and build on the valuable resources they have around them. Together with our communities we are co-designing Urban Resource Centres which will harness the social, economic and environmental opportunities provided by switching to a more circular model of production and consumption. By recognising and retaining value in our resources we can continue to enjoy the things we love while supporting resilient, thriving and resourceful communities.

About the Resourceful Cities Network

Resourceful Cities is an URBACT Action Planning Network of nine European cities that seek to develop next generation urban resource centres as a means to accelerate the transition to the circular economy. The idea for this network arose from one of the actions identified by the Urban Agenda Partnership on Circular Economy under its 'better knowledge' pillar - namely to promote Urban Resource Centres for waste prevention, re-use and recycling.

Broadly these centres serve as connection points for citizens, new businesses, researchers, and the public sector to co-create new ways to close local resource loops, while promoting waste prevention, re-use, repair, and recycling. Their precise manifestation will differ from city to city in response to the local context and needs identified.

Our network activities focus on harnessing the benefits of transnational cooperation and on supporting each city partner to adopt a participative and integrated approach. Working closely with their local stakeholders in the form of an URBACT Local Group (ULG) each city will draft an Integrated Action Plan (IAP). Each IAP will define the local actions to be carried out in response to the needs identified and will include the development of an Urban Resource Centre (URC) in each city.



*Spaces for circular
co-creation and action*

About the SSAs

Small Scale Actions (SSAs) are a new element introduced for this round of URBACT action planning networks (2019-2022). They emerged as a result of feedback from previous networks that wanted to experiment with ideas developed or shared during the action planning process.

A Small Scale Action is experimentation. It is an idea or a concept, perhaps already tried in one city, which is tested in another city's local context to check the relevance, feasibility and added value of its implementation within that new context.

Small Scale Actions are limited in time, scale and space and by their nature have the right to fail. The aim is for cities to learn from these tests, measure the results and either adapt, upscale or reject actions to be included in their Integrated Action Plan based on this experience.

An added benefit of these small scale actions is the opportunity they provide to keep stakeholders engaged and energised, demonstrating the impact of small changes and providing partners with valuable implementation experience. These small actions can help to keep stakeholders motivated, gather new energy and interest and provide proof to decision makers that some solutions are implementable and impactful. In a survey to partners the SSAs were identified as a key enabler in helping to maintain stakeholder motivation and to raise the project profile. The implementation of SSAs however was a very time consuming process for partners and it was not obligatory. For those partners who did decide to undertake these actions, they were provided with the opportunity to spend up to €10,000 of their URBACT funds to support the implementation of their Small Scale Actions.

About this compendium

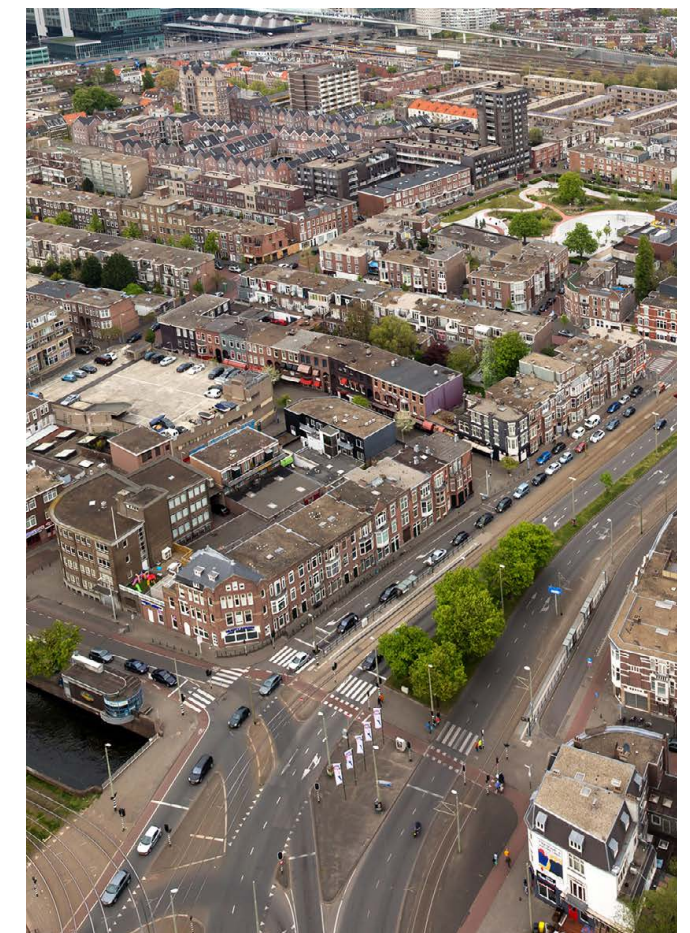
This compendium summarises all of the SSAs carried out within the Resourceful Cities Network. Each partner implemented at least one SSA with some partners implementing multiple SSAs. SSAs are collected and listed by city (not by theme). The aim is to provide the reader with a summary of the action and key information which may serve useful to other cities wishing to replicate these actions.



Resourceful Cities SSAs

A wide range of SSAs were carried out by Resourceful Cities partners, each one responding to an identified need within the individual city context. Actions included promoting citizen engagement and participation, raising knowledge and awareness of the circular economy, business supports, data collection and monitoring and trialling new business models.

All nine cities within the network openly embraced the opportunity to experiment and test out new ideas, each one appreciating the value of and benefitting from the experience. Each action regardless of the outcome has helped to gather evidence and better inform the development of each city's integrated action plan.





Den Haag

1. The Hague

1.1 Circular Interior Design Skills

Background

The city together with its stakeholders identified a need to raise awareness and support skills development in the area of repair and refurbishment. They decided to trial the effectiveness of a series of circular interior design workshops in order to meet this need.

Using the home as a focus area they wanted to support citizens to develop their creativity, repair and refurbishment skills while gaining an increased awareness of the value of the circular economy. The theory was that circular interior design skills could provide a wide range of people with the opportunity to actively participate in the circular economy.

Objectives

The action aimed to:

- Test whether the workshops could be effective in supporting ordinary people to design their own interior in a circular way
- Test the interest level of citizens in participating in circular design workshops
- Explore the level of demand for this type of service and the level of impact it could have on reducing waste

Location

The Laak-district in The Hague

Institutions Involved

Private: Kringloop Den Haag

Public: Foundation Duurzaam Den Haag

Timescale

Dec 2021 – March 2022

Resources required

The cost of the action amounted to approximately €6,000. This included the provision of resources and expertise necessary to provide the workshops which included guided tours of a second hand store. It also included the provision of equipment and materials necessary for the workshops. The budget was provided by the municipality.

Results achieved

A total of 15 residents of The Hague succeeded in re-designing their own living room using circular materials and methods. These were people from the Laak-district, a district with a high rate of unemployment. They reported that they really enjoyed the experience, will likely use their new knowledge and skills in other areas of the home and they enthusiastically show and tell their story to other local residents.

Key learning

It is clear that with a little guidance it is possible to support people to look at and refurbish their interior sustainably. At the same time the challenge of finding people interested and willing to participate in the workshops should not be underestimated.

Impact on the IAP

This action proved the potential for circular action on an individual level.

The focus of the IAP will be on developing Urban Resource Centers and strengthening the ecosystem of entrepreneurs. Based on this experience, we envisage this service could be delivered in the long term by one of the URCs which we plan to develop as part of the IAP.

A word from the SSA team

“It was fantastic to have the opportunity to test out these types of workshops in a real world environment. Putting our theory into practice helped us to maintain motivation and gain confidence that our plans for the urban resource centres were on the right track and could deliver valuable services to citizens while supporting our transition to a circular economy”

– Ger Kwakkel, Circular Economy Programme Manager,

City of The Hague

Further information

[Clarissa Peny](#)





1.2 Circular Lab 070

Background

Recognizing the need to bring the circular economy to life and to provide practical examples of circularity in action, the city of The Hague together with the members of its URBACT local group came up with the idea of the Circular Lab 070.

The Circular Lab 070 offers citizens in The Hague the opportunity to enrich their knowledge and skills in the field of sustainability and circular economy. It provides the opportunity for participants to exchange and discuss with others, building their network and inspiring the development of new circular solutions.

Through various low-threshold creative workshops, interventions and information meetings, in which knowledge enrichment, capacity building and behavioural change for both the elderly and young people are central, Circular Lab 070 makes the circular economy tangible and accessible.

Objectives

The goal of the Circular Lab was to explore how best to support people to unlearn certain existing habits in exchange for new practices and ways of doing things, in order to promote more sustainable and circular behavior.

Location

The Laak-district in the city of The Hague

Institutions Involved

The following public & community organisations were involved in the action:

[Buurthuis](#),
[Duurzaam Den Haag](#),
[Kringloop Den Haag](#)

Timescale

November 2021 – March 2022

Resources required

The cost of the action amounted to approximately €15,000 and was funded by the municipality. This included about 150 person hours to plan, coordinate and communicate the action as well as learning support and communication materials.

Results achieved

The Circular Lab 070 helped to promote behaviour change for a more healthy, circular and sustainable life among dozens of local residents in a disadvantaged neighborhood in The Hague. Five workshops took place in total. A key message shared was that by using the right materials and products in the right way, people can save money and contribute to the local economy while at the same time reducing environmental pollution.

Key learning

The Circular Lab 070 proved an effective way to bring the circular economy to life for hard to reach groups in disadvantaged areas. The lab built participant knowledge and

capacity in relation to all the steps of the R-ladder. By looking at consumption behaviour in a different way (refuse, rethink, reduce) and dealing differently with consumer resources (reuse, repair, refurbish, remanufacture, repurpose and recycle), the circular economy becomes very concrete and feasible.

The most logical place to start the circular economy is in your own home. Think of, for example, clothing, food, furniture and hygiene. The Circular Lab 070 method of focusing on applications of the R-ladder in the context of consumption behaviour and resources in the household proved very effective in engaging citizens in a practical way.

Impact on the IAP

Behaviour change is essential to achieve a circular economy, it plays a major role in almost all projects, from the purchase of products to waste separation. This action proved that initiatives like this can have an impact on behaviour change. Similar, related actions will be included within the IAP.

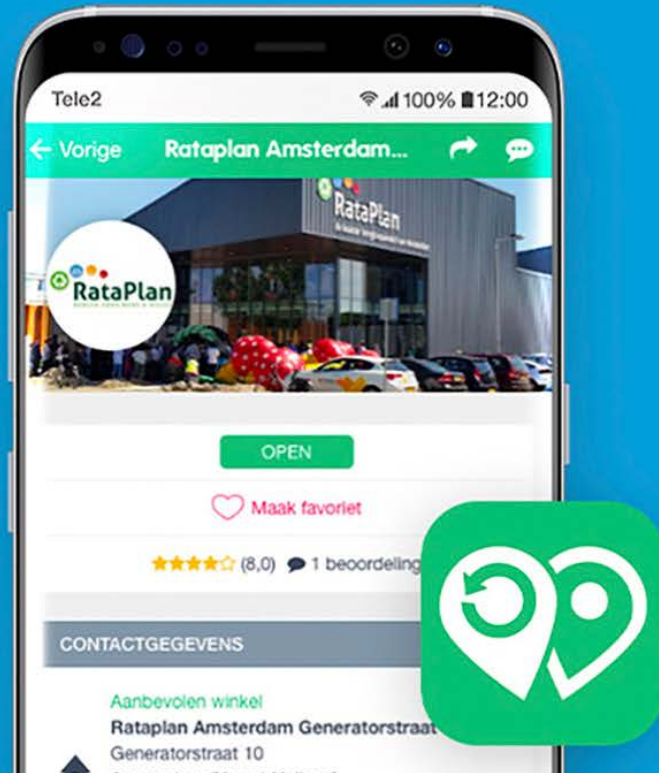
A word from the SSA team

“A better circular world starts in your own home!”

Further information

[Clarissa Peny, Instructor & Project Manager](#)





1.3 Digital Secondhand Shop

Background

The city identified the need to highlight and promote the valuable services and contribution provided by second hand stores in the circular economy transition.

Two digital applications (Spaarpas & KRPS; see below) were created especially for the Recycling Industry with both applications linked to each other. The first application ensures that data relating to goods and material flows is collected, monitored and made publicly available. The second application enables a reward system for citizens who bring goods to the participating second hand stores.

The Kringloop Spaarpas (app) is the only reward scheme for second hand stores in the Netherlands. The Hague is the first city to trial this system which can be easily rolled out nationally through the national Kringloop chain of second hand stores.

The rewards scheme allows everyone who returns or buys items to receive credit which can be spent at one of the affiliated branches. Users can also choose to have the savings donated to one of the 20 affiliated charities. For example, for clothing brought to the store one generally gets (depending on the quantity and quality) between 0 and 25 points, with each point worth 10 cents.

The second app – the Recycling, Planning & Registration System – KRPS was designed through intensive cooperation with other recycling organizations. The application allows money, goods and information flows of circular organizations to be monitored digitally efficiently and easily. Every action, every flow is logged and archived. Results and overviews can easily be made visible in various report styles.

The combination of the reward scheme together with the KRPS app provides valuable information to the municipality in relation to the types of resources that are being collected, their weight and location. They allow the municipality to better understand and monitor resource flows and availability and to develop systems to support their valorisation.

Objectives

The objectives of this action were to:
Test the feasibility of using these apps to gain insight into the type of items that are dropped off and taken and other characteristics of material flows in second hand stores.
Test the potential of the apps to promote a further reduction in Co2 and to increase the efficiency of the circular system.

Location

Various second hand stores under the Kringloop umbrella in The Hague.

Institutions Involved

Seven second hand stores in The Hague

Timescale

August 2021 – October 2021



Resources required

The software was already in place, but time was invested in linking the systems together and in tweaking the overall system until it could generate a good output. A total of €10,000 euro was spent and this was provided by the municipality.

Results achieved

The system provided a diverse range of valuable data, including:
No. of employees in the second hand stores involved in the trial: 13,500 (25% regular, 38% target groups, 23% volunteers, 14% internship & work placement).
Average thrift store size: 1241 m2.
Retail turnover at 100% second hand store affiliated recycling companies in 2019: €103 million.
Increase in store turnover compared to the previous year: 4%.
Number of paying customers at second hand stores: 13 million.
Growth in the number of paying customers compared to previous year: 4%.
Total resources collected by second hand stores: 140 million kg
105,000 tons of CO2 savings per year (equal to the CO2 absorption capacity of almost 65,000 football fields of forest).

Key learning

Data collected proved highly insightful and will support planning and decision making. Due to the scale of the operations and the currently capabilities of the applications

it was not possible to check more detailed information such as which type of items were sold per store. However in further iterations it will be possible to collect this data by categorising various individual items e.g. cutlery/plates/ mugs etc. could be monitored under the category of small household items.

Impact on the IAP

Based on the insights gathered and the potential of the apps to support better planning and management of these resource streams it is intended to include a related action in the IAP.

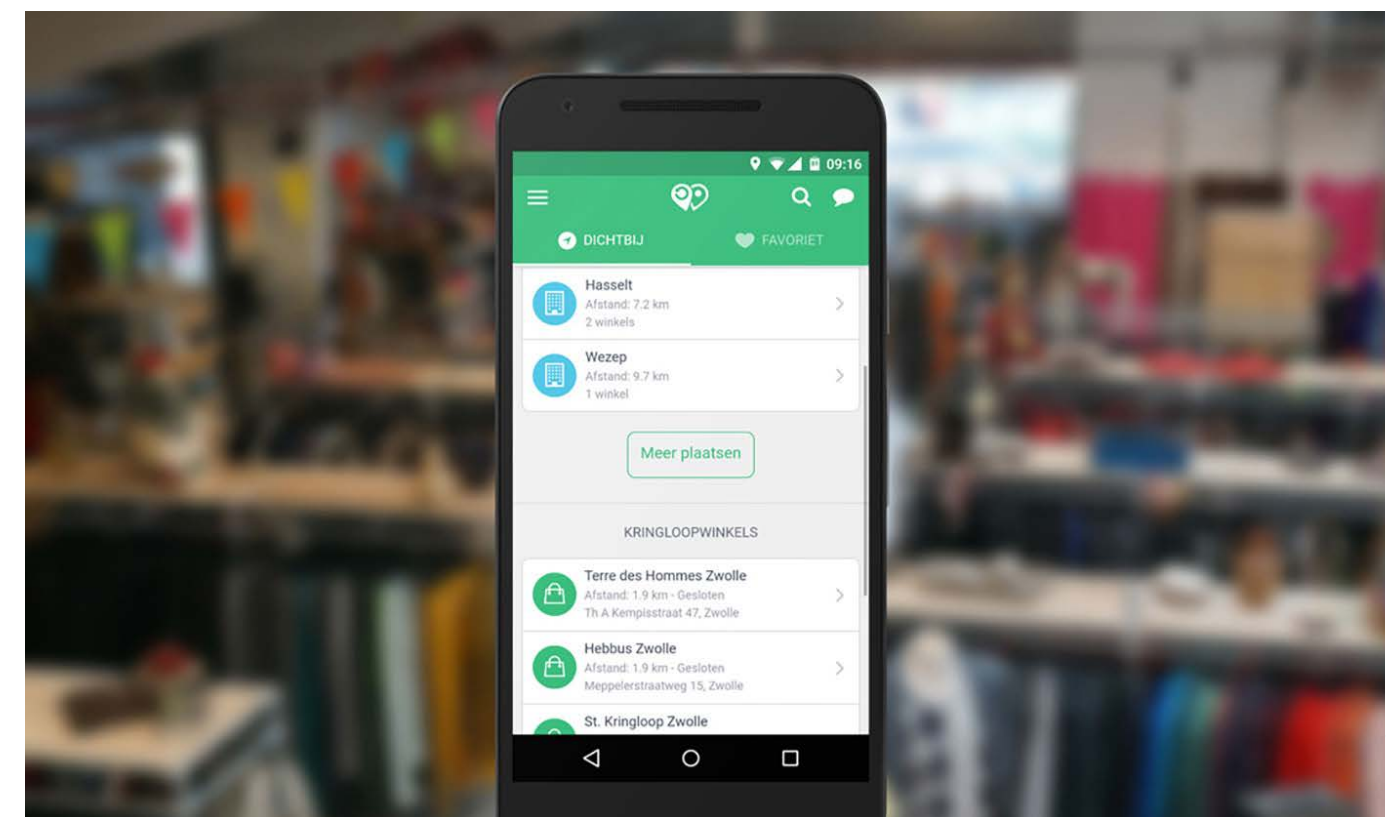
In the Circular Craft Centre in The Hague (in development) we will work with some of the sub-streams currently managed by the second hand stores to support upcycling initiatives and activities. Old and unusable items will be transformed into new products that are of value; waste will not exist.

A word from the SSA team

“Make better use of existing resources, activities and efforts at second hand stores, and put them on the map better.”

Further information

Martijn Tjepkema, Director of Kringloop Den Haag
[Martijn Tjepkema](#) | [LinkedIn](#)





1.4 Demand-oriented Collection of Used Goods

Background

Conversations with circular entrepreneurs in the city showed that it can be challenging and takes a lot of effort for them to source suitable second-hand items e.g. bicycle tyres, leather, etc. Such items are amply present in households, yet entrepreneurs do not have easy access to them. The municipality however can provide a vital connection. Thus the idea for this small scale test action was born.

Residents were asked to collect certain items and put them in a container, provided by the municipality, which is then collected door to door. Items were sorted and delivered to the entrepreneurs. The challenge for the collector (the waste management company HMS) was in the organisation of the logistics.

Objectives

The goal was to test the logistics. Two methods were tested. The first was to have the containers placed and collected on the street outside homes. The second was to have the container dropped and collected at each individual home. The latter turned out to be the best, with the caveat that this was also not the most efficient for apartment blocks.

Location

Neighborhoods in various districts of The Hague, including Bezuidenhout, Laakkwartier and Spoorwijk.

Institutions Involved

Public: [The municipality of the Hague](#) co-ordinated & facilitated the action.

Public: [HMS Waste Management Company](#) provided logistics.

Private: Bureau BinBang provided communication services

Social Enterprise: Made in Moerwijk did the sorting.

Timescale

From September to December 2021

Resources required

The total budget of this project was approximately €200,000 euros, of which €3,000 was contributed by URBACT. The municipality had made a budget available for this, as well as hours for management. The URBACT budget covered the cost of the bins.

Results achieved

The test was successfully completed. Valuable knowledge was gained about what motivates residents to participate and about what producers need in terms of the quality of materials. A total of 70 households participated. Over 1,000 goods were collected, sorted and delivered to upcyclers.

Key learning

While the action proved successful in terms of getting used goods into the hands of those who can create value from them the business case is not yet feasible without a financial contribution from the municipality.

Impact on the IAP

Based on the action results this has been identified as an important project for the municipality. The IAP will include an action to support and explore how best to scale up this demand driven collection system.

A word from the SSA team

“This action proved highly valuable in enabling us to explore how best to manage and operate a demand driven collection system. We can clearly see here how the municipality can better support circular material flows in the city and we look forward to scaling this up in the future.”

– Ger Kwakkel, Circular Economy Programme Manager, Gemeente Den Haag.

Further information

Ger Kwakkel, Circular Economy Programme Manager, Gemeente Den Haag. Email: ger.kwakkel@denhaag.nl





2.1 Surveying as a Method to Involve the Public in the Co-Design of the Urban Resource Centre

The city of Zagreb wants to develop an Urban Resource Centre (URC) as a way of accelerating the transition to the circular economy. The city together with the members of the URBACT Local Group (ULG) have researched various URC models that already exist in other cities. They know that if the URC is to be fit for purpose and impactful, it must meet the needs of the community. It is vital thus that citizens are involved in shaping the design and development of the URC.

The idea was developed by the members of the URBACT Local Group (ULG) with the aim of bringing the URC project closer to the public, gathering public opinion on the services, activities and possible benefits of the future URC and how the space could support their active participation in the circular transition.

The SSA sought to test the effectiveness of surveying as a means of collecting citizens' opinions and contributions to the design and development of the URC and its services. The surveys sought to gather information regarding:

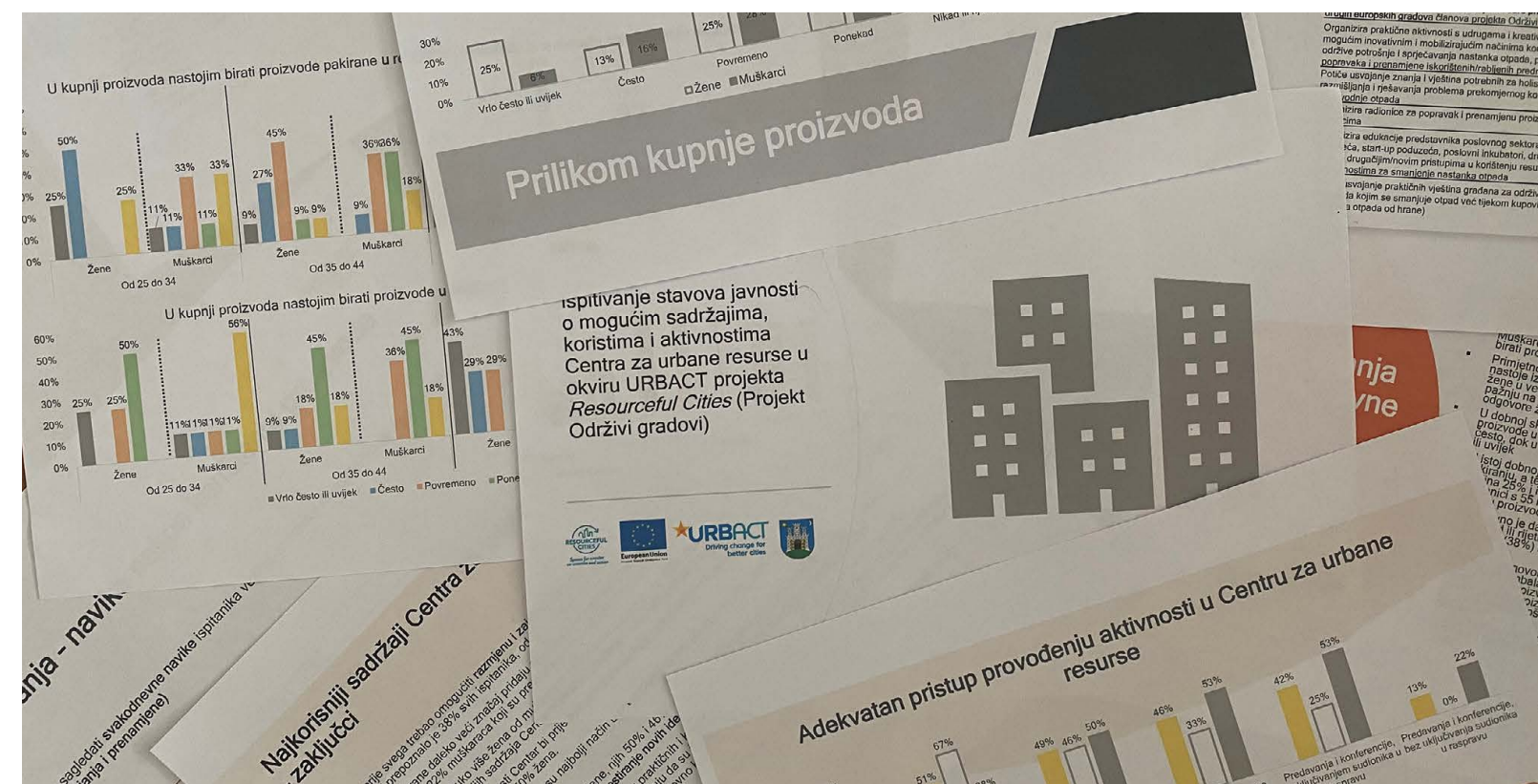
- responsible and sustainable attitude towards consumption (consumer habits);
- habits after using the product (separation and conversion habits);
- attitudes and awareness of respondents about the current state of the Earth in the context of resource use and impact on ecosystems, waste management and perception of their role and responsibilities in the consumer chain.
- preferred content and activities of the URC

- [PROFESSIONAL REHABILITATION AND EMPLOYMENT OF PERSONS WITH DISABILITIES – URIHO](#)
- [ZAGREB CITY HOLDING LTD, SUBSIDIARY ČISTOĆA](#)
- [ZAGREB CRAFTSMEN ASSOCIATION](#)

Academia/ Primary school:

- [UNIVERSITY OF ZAGREB, FACULTY OF FORESTRY AND WOOD TECHNOLOGY](#)
- [KAJZERICA PRIMARY SCHOOL](#)

Although the number of respondents was lower than expected, the information gathered provided valuable insights into the habits and opinions of respondents, their role and responsibilities, attitudes and awareness of waste management and how they see their contribution to the design and development of the URC and its services.



Key learning

Respondents who completed the surveys were very interested in learning more about the Resourceful Cities project and the URC. They also welcomed the use of the survey as a means of information and participation.

The research suggested that the most interesting activities to attract citizens to the URC are considered as easily accessible awareness raising, capacity building and networking activities such as workshops, lectures and conferences. Respondents also emphasized the importance of ongoing and regular consultation with the public to ensure that services and activities remain relevant and effective.

Respondents' answers by age group suggest that the URC's activities should be targeted towards those aged between 25 and 34. In this age group insufficient understanding of the concept of the circular economy and the impact of consumer habits on the environment and climate change is indicative.

Impact on the Integrated Action Plan

Based on the results of this SSA the city of Zagreb decided to include a related action within their IAP.

They will replicate and scale up the use of surveying as a means to gather public opinion. In future related activities they aim to reach a wider audience through several channels such as the website of the City of Zagreb, the city's Facebook page and advertising in local website.

A word from the SSA team

“We didn't know how effective this method of gathering public opinion would be. Testing it out at a small, low budget level and receiving a positive response from the public, provided us with the confidence and evidence we needed to decide that further investment in and use of this method would be worthwhile in future actions.”

– Josipa Karača, Project Officer, City of Zagreb

Further information

[Project website.](#)

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City Office for Economy, Environmental Sustainability & Strategic Planning
Environmental Protection and Waste Management Sector at the City of Zagreb



3. Famalicão

3.1 Zero Waste Market

Background

As part of their ongoing efforts and ambition to advance the transition towards a more circular economic model, the city of Vila Nova de Famalicão decided to test the feasibility & effectiveness of a Zero Waste Market.

The idea was developed by the members of the URBACT Local Group (ULG). During the course of several meetings, ULG members agreed on the potential of the local market as a “laboratory” to test new solutions and to implement different circular activities, while involving the market clients, market operators and the ULG members themselves.

Using the market as platform the action sought to tackle three specific challenges namely, waste prevention, resource recovery and education:

Eliminating unnecessary waste (e.g. banning disposable coffee cups & plastic bags) & replacing them with sustainable options (e.g. refillable coffee cups; compostable & reusable bags);

Recovering & reusing market waste to its full potential, even before the recycling process (e.g. turning the market plastic waste as a resource for circular material/products);
Shifting the “old paradigm mindset” of market clients & vendors into a sustainable/circular approach.

Solutions tested included:

“Circular Cabinet” - a repurposed cabinet placed in the market, where market users can both collect and deposit things like bags, jars, cardboard boxes, egg cartons, which can then be used for their shopping in the market. This initiative sought to help change consumer habits by promoting a “buy in bulk” approach, while bringing attention to the importance of reducing waste resulting from product packaging.

A waste management workshop for market vendors - developed in partnership with [RESINORTE](#), which focused on waste reduction and the optimization of recycling habits.
“Circular Market” – a series of on-site workshops for diverse audiences - from senior citizens to school children, designed to sensitize the community to a circular perspective, demonstrating how things previously considered waste are in fact valuable resources. From vinyl records turned into clocks, to crochet work that can be made into a lamp - recycling, reusing and repurposing are key words. Local partners supported the development of activities that focused on reducing food waste, the repair of small appliances, composting, as well as a webinar about circular economy and an exhibition where products and services from local companies and startups were showcased.



Objectives

Using the local market as a test bed the SSA sought to explore new solutions for waste management in the city. It aimed to answer the following questions:

Is it possible to create a zero-waste market in Famalicão & is it economically viable?

What kind of social, environmental, and economic impact can we generate with these circular initiatives?

Can we provide circular solutions with different applications (composting; textile and footwear industries; bioconstruction)?

Do we have partners interested in the waste produced in the market?

Do the quantities produced in the market meet the needs of the stakeholders?

How will the waste be managed/collected?

Can this model focussed on the market be replicated in other facilities e.g. schools within the city?

Can a Zero Waste market act as a catalyst for the development of innovative solutions and business focussed on the waste generated in the market (e.g. shoes made with coffee grounds; natural dyed shirts with onion peels; a wardrobe made with fruit wood boxes; reusable boxes made with recycled/upcycled plastics) through the promotion of collaboration between local producers and other stakeholders (e.g. entrepreneurs & research centres).

Location

Vila Nova de Famalicão Municipal Market, Vila Nova de Famalicão

Institutions Involved

The Zero Waste Market SSA was developed by the following entities:

Public: [Município de Vila Nova de Famalicão](#);

Community: [Famalicão em Transição](#); [Refood](#)

Academic: [CIOR](#);

Private: [Resinorte](#); [Life in a Bag](#); [Revolução das minhocas](#); [Reciclagem Orgânica](#); [Minority Denim](#); [Recoffee](#); [Alexandra Arnóbio Upcycling Projects](#); [EConnect Portugal](#); [Earthship](#)

Timescale

February 2021 to November 2021

Resources required

The total cost of the SSA was €29,261. It was funded through the URBACT Resourceful Cities budget and the national Environmental Fund.

Human Resources were provided both from Famalicão Municipality and through the efforts of partners.

Results achieved

Results suggested that not only is it feasible to achieve a zero waste market in Famalicão, but that such a space can also greatly contribute to advancing the city's efforts to transition towards a circular economy model.

From a social and educational standpoint, the SSA had a positive impact on the local community, increasing aware-

ness regarding environmental issues and providing knowledge about sustainability and circular economy, through the involvement of local citizens.

As well as a potential to boost to the local economy, by bringing visitors to the local market and getting them acquainted with the space and the products and services being offered, it also proved beneficial in terms of getting the local businesses and institutions on board with circular economy matters, allowing for further involvement in future projects and initiatives.

Quantitatively, the workshops collectively amassed over 250 participants from different age groups; there were over 34 hours of training provided to the community; 250 reusable bags distributed in the market, over 950 visitors to the exhibition and 587 views on the “Circular inspiration” webinar (as of November 25th 2021).

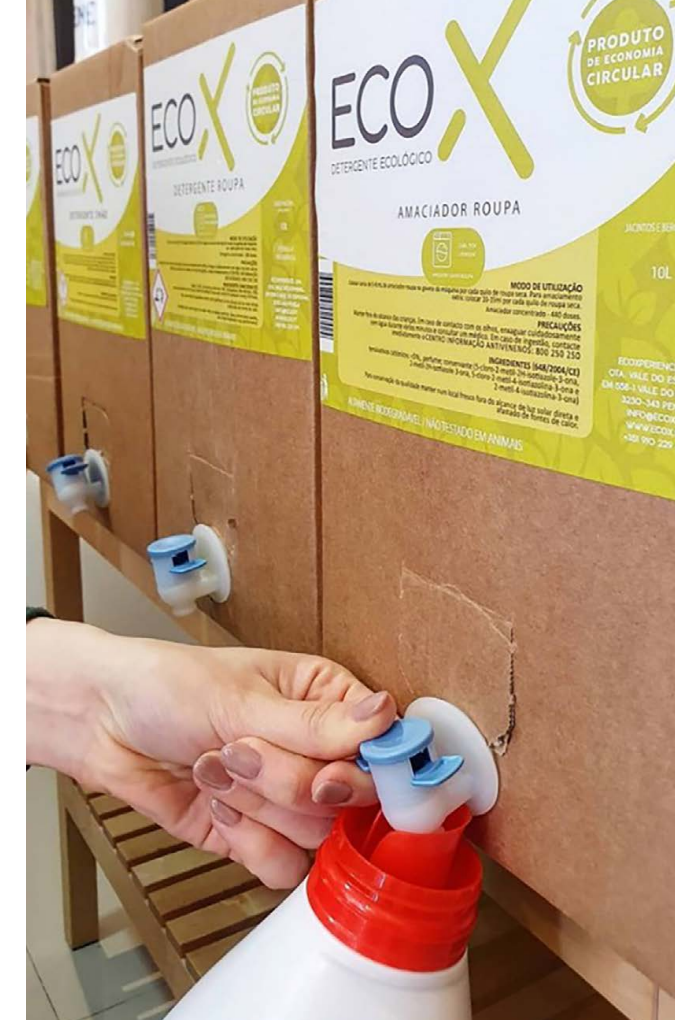
Key learning

The SSA was developed & implemented in the midst of the COVID -19 pandemic. This resulted in a series of unexpected challenges and setbacks forcing the ULG members to come together and collectively work on finding solutions. In spite of the challenges presented this was a valuable experience, strengthening relationships and reminding us of the need for adaptability, resilience and agility to be built into future activities and services.

While the development of new business models takes time the Zero Waste Market can provide an environment and conditions for effective collaboration between stakeholders that will nurture further innovative solutions and ideas.

Impact on the IAP

Thanks to the positive results achieved during this test



phase of the “Zero Waste Market” a related action will be developed within the IAP. The action will seek to enhance and consolidate the Local Market of Famalicão (located at the core of the City) as a robust Urban Resource Centre assuring the necessary link between circular public policies and the related practices that must adopted by the community.

A word from the SSA team

“The chance to experiment with some ideas in a real world environment has been both insightful and invaluable, providing us with the necessary support, confidence and evidence to pursue our vision of ‘A Circular Path for a Traditional City Market’”

– Ms. Ana Silva, Project Manager of the Resourceful Cities project, Famalicão Municipality

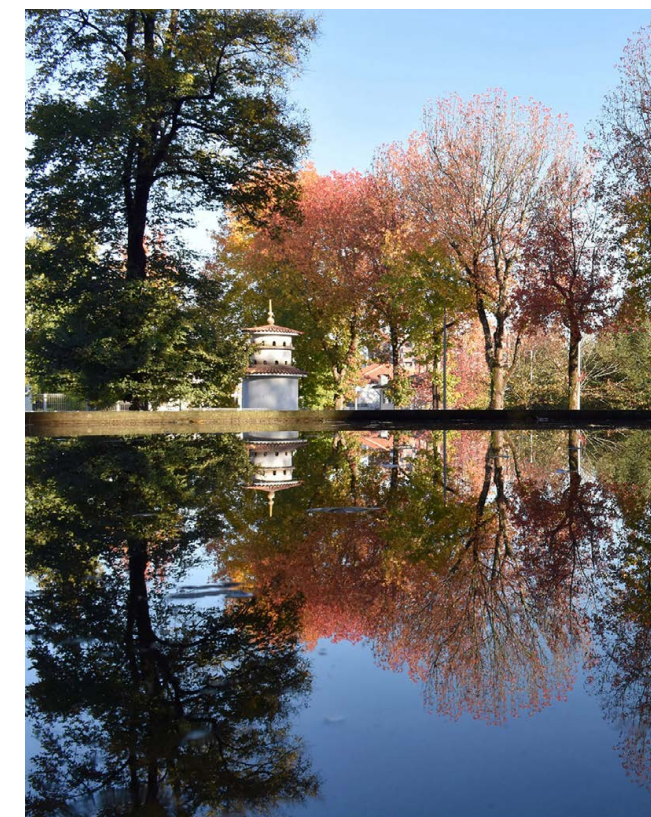
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Local Coordinators of the Resourceful Cities Project in Famalicão Municipality

[Famalicão Municipality Website](#) (International Projects) [Praça Circular Project](#)





4. Cáceres

4.1 Composting in Municipal Orchards of Cáceres

Background

This action was an initiative of the Popular University in Cáceres, who manage a circular agro-food laboratory in Cáceres as well as the municipal orchards. The orchards are located in municipal land where citizens grow their own fruit and vegetables, both for sale and self-supply.

The orchards are home to a dry farming initiative which seeks to adapt to the local climate in Cáceres and the lack of water that climate change implies. Thus, potatoes, cereals, olive trees, vine, onions, etc are grown there exclusively. The growers wished to start their own composting to obtain ecological, handmade fertiliser in more significant quantity. Previously they used compost originating from a cattle farm in the outskirts of the city, but this material was not resource efficient, due to the resource intense nature of animal agriculture and the need and costs of transportation.

The city wanted to test the feasibility of this composting initiative with a view to replicating and scaling up for the other orchards, parks and gardens in the city. This action on a small scale would provide valuable information to inform the development of future related initiatives. The intention was to demonstrate that it does not make sense to fertilise green spaces with chemical fertiliser when organic material from the city (leaves, grass, branches) is wasted. Stakeholders also wanted to maximise the impact of this initiative by inviting educational centres to bring their students, so that they can be inspired by this action and replicate it in their own community.

Objectives

Composting phase objectives:

- testing composting capacity to fertilize a municipal orchard.
- organising a social innovation experience between two different departments of the city hall in a participative and integrated way involving ULG members and civil society.
- testing the city's first composting experience in a green space and its suitability for replication in other areas.

Educational phase objectives:

- raising awareness among children about the circular economy as a vital ingredient in sustainable development.
- organising a social innovation experience between two different departments of the city hall in a participative and integrated way involving ULG members and civil society.
- raising knowledge among children about the municipal orchards of the city.
- raising knowledge among children about harvesting techniques.
- illustrating the complete cycle of the circular economy regarding food: composting is produced in the orchards to be then utilised to fertilize the land and grow vegetables.

Location

Municipal orchard "La Lentejita", Juventud St, 10.002, Cáceres.

Institutions Involved

Public: Department of Tourism, Innovation, Technological Development and Transparency.

Innovation team co-designed the action with the Popular University, co-ordinated it, managed the tender procedures, planned the educational visits and communicated the whole action.

<https://www.ayto-caceres.es/>

Public: Department of Social Affairs, Popular University tackling Education, Inclusion, Employment, Accessibility, Women and Security.

The Popular University co-designed the action with Area of Innovation, provided the necessary technical expertise in relation to composting and organised the content of the workshops for the school visits.

<https://up.ayto-caceres.es/>

Timescale

March 2022 – June 2022

Resources required

The action was funded through the URBACT Resourceful Cities budget.

Costs included the leasing of machinery and tools (€9,273.23) and insurance to cover accidents (€41.05)

Results achieved

Since implementation suffered delays a final evaluation has yet to be carried out. Regarding composting however, each farmer has been supplied with a 1m3 composter which has a capacity to store up to 200kg of organic material. Taking into account that they will be filled with leaves, a



light material it is expected that 2,000kg of organics will be composted in total. According to research, agro-composting has an efficiency of 26-34%, which means that every 100kg of organic material will result in 26-34kg of compost after 9 months. Applying these calculations here, the expected results are 52 – 68kg of compost in every composter or 520-680kg in total.

Ten farmers in total are participating in this action with each of them harvesting an area of 100m². This means a surface of 1000m² is covered within this action.

Student visits are being planned and a final evaluation will be undertaken in July 2022.

Key learning

While the action is still in its infancy, early learning suggests that this orchard can work as a model for other green areas of the city that could use their own compost for gardening. In “La Lentejita” experienced people are available to explain and share the process.

The farmers involved are satisfied about using handmade compost to fertilise their orchards and the use of machinery allows an increase in scale and capacity resulting in more compost.

More broadly the action has an indirect impact on the orchard’s carbon footprint, since the enterprises in charge of the waste collection and pruning waste no longer have to drive the material to the landfill, 20 kms away. If this SSA is replicated in other green areas, we believe this would be a significant step forward in closing the loop and utilising urban organic waste to fertilise green areas of the city.

Impact on the IAP

We have included a related action focussed on the replication and scale up of this SSA in the IAP as a preliminary step to reinforce LACA. Based on our experience the IAP action will be adapted to take unforeseen weather conditions into account into the risk analysis, since rain interrupted and delayed this action several times and this has not been foreseen.

Within the IAP we will include expand the educational aspect of this action by planning for a wider range of visits to invite not only schools, but others involved in the management and maintenance of green spaces, so that they can benefit from seeing this initiative in practice.

A word from the SSA team

“Composting is an important step on the road to closing food loops. It is a way to value organic waste fairly, transforming it into compost that will grow food for the citizens. It makes the circular economy visible and it allows us to invite people to witness the change.”

– Elena Dominguez Crespo, Project Assistant, City of Cáceres.

Further information

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5. Opole

5.1 Educational workshops at the URC in the city of Opole

Background

The city of Opole recently opened an Urban Resource Centre (URC) within the city centre. The aim of the centre is to provide an accessible space that runs activities to promote greater awareness and participation of citizens in the circular economy.

The city wanted to run a series of activities at the URC to promote greater awareness and engagement amongst the adult resident of the city. Before investing in a large scale programme the city wanted to gain more information about this cohort of the population so that they could develop an impactful and fit for purpose programme of activities in the longer term.

It was decided to trial an educational campaign for the residents of the city of Opole, specifically targeting adults. They decided to trial regular workshops targeting different interests of the residents, like card crafting, decoupage and weaving.

The long term goal of these workshops is to educate citizens on the topic of circular economy in order to (a) reduce the amount of waste that is created and (b) reduce the amount of waste ending up in landfill.

The campaign was targeted at primarily at adult residents of the City of Opole, who were not at the time enrolled in any continuing education program.

Objectives

The action sought to gather answers to the following questions:

- What is the knowledge of the residents, regarding correct segregation and circular economy?
- Will education and information encourage people to use second hand items & increase the amount of products dropped off and collected by citizens at the URC?
- Will the URC be a good place for regular education of citizens?
- Will there be enough space in the URC for educational activities?
- Are the education activities being trialled positively perceived by adult residents of Opole?
- What form of the proposed educational activities do the residents prefer?
- At what times would the residents like to take a part in educational offer?



Location

ReUse Shop (Urban Resource Centre), Ks. Opolskich Street 10/1D, Opole City Centre

Institutions Involved

Public: Department of Municipal Waste Management at the City Council of Opole

Public: European Department at City Council of Opole

Academic: [Municipal Teacher Training Centre](#) in Opole (MCWE)

Community Organisation: Restart Centre: [Klub Integracji Społecznej - Centrum RE-Start w Opolu - Home \(facebook.com\)](#)

Timescale

SSA July 2021- January 2022

Resources required

Human Resources (planning, designing, facilitating the workshops): €5,129

Communication & promotion - €1,400

Equipment & materials €3805

Results achieved

210 people participated in the workshops

An average of 60 people visited the URC each day

On average 60kg of items were brought to the URC each day

47% of all items brought in by weight were books

In a survey of 210 people 89% of respondents knew the meaning of the term “Zero Waste” and 92% confirmed that they separate waste.

Participants expressed an interest in attending future

educational activities in particular lectures, repair and DIY workshops, clothing repair and upcycling.

Key learning

Interaction with city residents through the URC and the workshops and based on the survey results suggests that the majority of residents (69%) regularly repair broken items rather than buying new.

The SSA proved the URC to be a suitable and effective place to support educational activities aimed at raising citizen awareness of an participation in the circular economy. The URC has sufficient space to carry out educational activities, including workshops for about 10 - 20 people. The preferred time expressed by participants for educational activities was Saturday mornings.

The trial of educational activities at the URC proved very popular among the city’s residents. The initiative was very positively received by the residents of Opole and this was reflected in the monthly number of visits to the URC, as well in the number of items dropped off and collected.

The experience demonstrated the need to open more exchange points and resource centres in other areas of the city, especially for clothes and bulky items. The existing URC does not have space for bulky items e.g. furniture.

Given the demand and interest demonstrated by citizens in this initiative the city is surprised that associations and NGOs are not already interested in and involved such initiatives. There may be an opportunity for greater collaboration here.

Impact on the IAP

Arising from the high level of interest and demand in these educational activities, related activities and services will be designed into the service delivery plan of the URC. This will be reflected in the IAP.

Space will need to be found for more exchange points and consideration is being given to launching bulky item exchanges at the municipal recycling centre points in Opole.

The city intends to actively encourage greater cooperation and invite associations and non-governmental organizations to joint initiatives.

A word from the SSA team

“We wanted to design education and awareness raising activities that were accessible and of interest to citizens. Testing out some activities on this small scale allowed us to gather vital feedback from citizens. This feedback will inform the development of all future educational workshops and activities. In this way we know that our efforts are responding to real citizens needs and interests are having an impact.”

– Iwona Kowalczuk, Project Manager of Resourceful Cities in the city of Opole

Further information

[URC Facebook page.](#)

Summary of the SSA is available on the [smieciopolis website.](#)

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6. Ciudad Real

6.1 Furniture recycling workshops as a means to raise awareness of the circular economy

Background

The city identified a need to raise awareness about production and consumption habits in our current linear system. A series of Furniture Recycling Workshops were developed as a practical way to both raise awareness amongst citizens of the circular economy and to promote their active participation in a circular initiative locally.

The action also hoped to inspire other alternative initiatives to optimize local resources in an economically sustainable way. The workshop was designed to promote citizen participation in the repair, recycling and reuse of furniture collected from the city's Green Point and elsewhere.

Citizens, companies and various local and European public bodies collaborated in the implementation of the workshops - promoting transversality and a culture of citizen participation with the administration.

Objectives

The city's environment department, together with the department for employment, training & economic development (IMPEFE) wanted to test these workshops as part of their intention to:

- To develop an urban resource centre, promoting the circular economy at local level through a comprehensive and participatory approach.
- Use the circular economy to achieve an efficient use of resources, facilitating waste reduction.
- Awaken the ecological awareness of citizens by encouraging recycling and reuse of waste.
- The Furniture Recycling Workshop aimed:
- To develop sustainable training activities in line with environmental values.
- To promote the use of spaces for meeting, debate and knowledge development.
- To encourage the promotion of citizen participation in the city.

Location

'House of the City' or 'Casa de la Ciudad', Valle de Alcudia Street, 13004 Ciudad Real. This is a meeting place in Ciudad Real, which brings together the city's associations, as well as cultural and social activities.

Institutions Involved

The workshops were created and delivered in partnership with the following public entities:

"House of the City" provided a [location for the workshop](#).

Department of Citizen Participation took a coordinating role, they advertised the workshops via their [communication channels and provided materials](#).

Department of Sustainability took a [management role](#).

Ciudad Real Green Point provided the [furniture for the recycling](#).

Municipal Institute for Promotion, Training and Employment (IMPEFE) took care of [management, coordination and communication activities](#).

Timescale

From September to December 2021

Resources required

The workshops consisted of 13 weekly sessions of 2.5 hours each. They were designed and facilitated by the participating organisations with the support of Elena Pérez, a graduate in Art History, Antique and Wood Restoration. Partners also provided the participants with the necessary material, machinery and tools. The Casa de la Ciudad (House of the City) provided the classrooms, tables and chairs. Total costs amounted to €2,860 which was sourced from the URBACT funded Resourceful Cities Project.

Results achieved

14 people from diverse backgrounds participated in the series of workshops. Due to the pandemic restrictions, the workshops were organised in two groups, with 7 participants per group. Part of the activities were carried out jointly including visits to the Green Point recycling centre, a local mattress factory and to the "Elisa Cendrero House Municipal Museum" at the end of the workshop.

The participants consisted of 13 women and one man, aged between 39 and 70 years old. Participants had diverse educational backgrounds from primary level to university graduates. Half of them were working, the other half were unemployed, on leave of absence or retired. The diverse profiles of the participants contributed to the richness of discussions and interactions and there was great cohesion within the group.

The participants formed new social bonds, exchanged ideas, knowledge and encounters. Feedback suggested that they enjoyed a sustainable training activity aligned with environmental values.

Participants reported increased ecological awareness having participated in a useful and practical workshop that encouraged recycling and reuse of waste. They said they would consider using the skills gained to refurbish other old furniture and expressed an interest in further workshops. They appreciated and valued the opportunity to learn about reuse and were inspired to give a new life to other objects previously considered useless to them.

Citizens learned a variety of new techniques used to recycle furniture. They learned how to distinguish ecological, non-toxic and environmentally friendly products and received a list of local businesses where the necessary tools and materials could be found.

The group worked on two old bedside tables, collected at the Green Point. The refurbished tables will remain in "La Casa de la Ciudad" with the intention of making the action visible and forming part of the building's furniture.

Key learning

The Furniture Recycling Workshops proved an effective instrument to contribute to sustainable solutions, with the aim of bringing about significant changes in the urban environment. The results achieved were considered effective and profitable from an economic, social and environmental perspective.

There was a high level of demand and workshops were over-subscribed. Participants rated the activity very positively. It allowed them to enjoy training in different areas, such as optimising resources, carpentry, upholstery, etc. More than that, participants felt empowered being able to work on their ideas and skills. Furniture upholstery is a practical and effective way of supporting citizens to actively participate in the circular economy.

Such workshops can have a positive impact on the participants' environment and in the municipality contributing to the revaluation of waste and the way it is managed.

Finally, the local media also showed interest in this action, highlighting the importance of this type of project, preserving resources and promoting sustainable growth in cities. Impact on the IAP

Actions supporting the replication and scaling up of this activity will be included in the IAP. This particular action will be adapted, increasing the number of hours and the number of participants. It is expected to be consolidated as a permanent action.

A word from the SSA team

'The opportunity to test out these workshops has been really valuable. The workshops proved highly effective in promoting ecological awareness by encouraging recycling and reuse of waste. With a small investment we were able to see that further investment in these actions will pay off and support our efforts to transition to a circular economy.' – Eva Navarro, Project Manager, IMPEFE, Municipality of Ciudad Real

Further information

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<https://www.impefe.es/comienza-el-taller-de-reciclar-de-mobiliario-del-proyecto-urbact/>
[Local Television News \(minute 6'\)](#).



6.2 Circular Economy Guide for SMEs in Ciudad Real

Background

The city council of Ciudad Real identified both a need and an opportunity to support SMEs and start-ups in their adaptation and transition to the circular economy. This identified need was further backed up by existing EU, National and Regional Circular Economy Strategies.

What challenge is it addressing?

The city's economic development department (IMPEFE) observed that sustainability and circularity is not strongly reflected in the business models of many of the city's start-ups and SMEs. This absence of sustainable content prevents the city from generating social and environmental value.

The city wanted to test the effectiveness of a circular economy guide for SMEs in raising awareness amongst entrepreneurs about climate change and the problems associated with the current linear economy. They also wanted to test its effectiveness in supporting businesses to introduce improvements and savings derived from applying environmental management systems of a circular nature.

Objectives

The main objective of the guide is to raise awareness, motivate and promote sustainability, with a circular approach, to entrepreneurs and small businesses in the municipality of Ciudad Real, while transferring the competitive advantages and added value of sustainability to their business models. The action intended to:

Promote a sustainable and circular focus amongst entrepreneurs

Focus on sustainable innovation as an opportunity in the entrepreneurial ecosystem of Ciudad Real

Build solutions with sustainable and social impact

Mitigate the environmental footprint of business and contribute tackling climate change

Create a culture of corporate social responsibility aligned with the SDGs

Location

Online for SMEs in Ciudad Real

Institutions involved

The guide was created and publicised in partnership with the following entities:

Public:

Department of Sustainability managed the process.

IMPEFE. Local department for Economic Development, Training and Employment (PUBLIC).

Non-Profit Association:

The non-profit organization of entrepreneurship APROFEM developed the guide and introductory webinar.

Timescale

Sept 2021 - December 2021

Resources required

A total of €2,800 was spent on this action. Funding was provided from the URBACT funded Resourceful Cities Project

Results achieved

20 entrepreneurs and small businesses in Ciudad Real were introduced to the circular economy guide during an online webinar.

This guide fulfilled in part a need to support the city's SMEs to better understand and transition to the circular economy. The guide also supports new businesses, created with the support of IMPEFE, to incorporate circular practices into their business models. This represents both a challenge and an opportunity which this SSA has served to emphasise.

Key learning

Based on the city's experience of developing the guide and promoting it through the webinar the city has decided to adapt the duration and style of future activities aimed at promoting the guide. Future activities will be longer and take a more hands on, practical approach including real life practical examples and support activities tailored to the individual business needs.

Impact on the IAP

In the IAP, a specific related action will be incorporated, with the aim of training and promoting circular business models in the city's SMEs and amongst new entrepreneurs.

A word from the SSA team

“The development and promotion of this guide served to highlight the scale of both the challenge and opportunity of supporting businesses and entrepreneurs in the city to adapt to and take advantage of the transition to a circular economy. It's been a really enlightening process and will help us to develop further relevant actions to support this process”

– Eva Navarro, Project Manager, IMPEFE, Municipality of Ciudad Real

Further information

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7. Bucharest

7.1 The Schoolyard Composting Corner

Background

Working closely with stakeholders as part of their involvement in the Resourceful Cities network, the municipality of Bucharest 3rd District gathered a series of ideas for small scale actions from their URBACT local group of stakeholders.

Following a vote on all ideas, it was decided that the pilot action of The 3rd District should focus on the subject of urban composting.

The idea was to organize compost sites in three schoolyards, and to carry out training workshops for 60 students on subjects like “reduce-reuse-recycle”, biodegradable vs. non-biodegradable, compost & composting, healthy soil & healthy food, etc.

The concept of urban composting isn’t well explored in Romanian cities, so the SSA was an opportunity to test the reactions of the local community (especially schoolchildren and high-school students) to the idea. Testing the SSA in a closed environment allowed for a better monitoring of the process, especially in a community that isn’t familiar with the concept of urban composting.

Objectives

The goal was to use the school yard composting corners as a means to promote the importance of composting in urban areas and to encourage circular practices, through practical and educational activities. The SSA aimed to test the local community reaction and receptivity to the idea of urban composting and to see if the action was worth upscaling.

Location

The SSA was tested in three schools in different parts of the district:
 “Dante Alighieri” Theoretical High School (lower secondary and upper secondary education)
 “Mihai Bravu” Technical College (upper secondary education)
 “Costin D. Nenițescu” Technical College (upper secondary education)

Institutions Involved

The SSA was designed with the help of the URBACT Local Group of The 3rd District and is the result of direct collaboration between the local authority and the local stakeholders. Institutions involved included:
 Public: The Municipality of The 3rd District primarie3.ro
 Academic: “Dante Alighieri” Theoretical High School liceuldantealighieri.ro
 Academic: “Mihai Bravu” Technical College
 Academic: “Costin D. Nenițescu” Technical College
 Private: ‘Urban Cultor’ carried out the workshops urbancultor.ro

Action/Date	Sep '21	Oct. '21	Nov. '21	Dec. '21	Jan- May '22
Present the project to the 3 schools and get their support					
Setting up the composting corners					
#1 Workshop: Reduce - Reuse - Recycle					
#2 Workshop: Compost, a universe full of life					
#3 Workshop: Compost, essential gestures & actions					
Monitoring the composting process					

Timescale

The SSA was implemented between September and December 2021, when the composting corners were set up and the workshops were held.

Resources required

The SSA was financed through the URBACT Resourceful Cities budget and the total implementation cost amounted to 18,000 RON (approx. €3,600). The funds were used for the procurement of the composting bins and for running the workshops.

Results achieved

Students showed an initial interest and willingness to contribute and participate. There was far more interest from middle school students (10-15 year olds) than from high school students (15-19 year olds). The initial interest and excitement appeared to wear off quickly and there was a very low intake of waste in the composting bins.



Key learning

It is essential to find a person willing to monitor the composting process and to perform the necessary operations - measuring the temperature and moisture, or turning the pile.

New actions and events are needed to ensure that the students contribute to the compost intake and that the positive momentum and commitment is maintained.

Impact on the IAP

A related and scaled up action will be included in the IAP. The SSA will be adapted to incorporate the key learning and implemented throughout the schools in the District. A pilot project will also start in one of the apartment blocks in the district to test the willingness of owner associations to contribute to such a project.

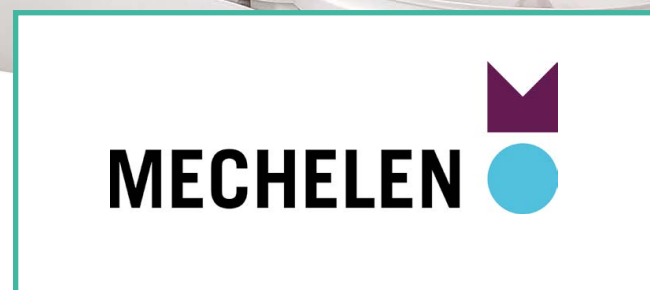
A word from the SSA team

“We learned some very valuable lessons from this small scale action. We know now that we need to include elements in the design of these actions that support and promote continued participating in the composting effort. We also see the value of urban composting which requires small gestures, that have a positive impact on nature and improve local communities”.

– Mihai Botea, Project Manager of Resourceful Cities at the municipality of Bucharest 3rd District.

Further information

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8. Mechelen

8.1 Trialling the development of a biolab, starting from a mushroom nursery that uses coffee grit

Background

Wanting to initiate a bio-circular incubator where citizens, organisations and entrepreneurs work together on high-value valorisation of organic waste streams in the future, the city supported [Citamine](#) to set up a small scale mushroom nursery. The nursery uses coffee grounds and other organic waste streams (grasses from berm management) as a soil for local food production.

Oyster mushroom nurseries on coffee grit struggle to survive because the current, classic business models are not profitable. This action wanted to change this, testing new ways to create value and income by promoting awareness raising through workshops and providing open source tools for citizens to grow mushrooms at home, through storytelling for businesses and exploring new ways of working across the value chain.

Objectives

The objectives were to:

- Use this SSA as a test case for the development of a bio-lab in the Impact factory, the city's planned Urban Resource Centre, which will promote collaboration between citizens, associations, entrepreneurs and researchers.
- Find out how the city can support start-ups/local associations that want to develop a circular business model
- Make the circular economy potential tangible to the broader public, including citizens of Mechelen
- Stimulate bottom-up innovation by teaching citizens the needed skills for circular entrepreneurship (offering open source tools, room and gear for experimentation and workshops)

Location

[The Impact Factory](#) at the Potterij, an old industrial laundry in the city centre of Mechelen. This brownfield site is reconverted into an Urban Resource Centre where citizens and visitors can experience the potential of the circular economy and entrepreneurs can work together to speed up the transition to a circular economy.

Institutions Involved

Civil society: Citamine is the owner of this action. Citamine is a citizen-led collective which wants to turn Mechelen into an edible city ([focus on local food production](#)). <https://citamine.be/portfolio/coflab-oesterzwamkwekerij/>

Public: [The city of Mechelen](#) supported Citamine both financially and in terms of connecting entrepreneurs and in overcoming the hurdles of setting up the oyster mushroom nursery. The city also provided coffee grit (from an elderly care home in the vicinity of the Potterij and a hospital).

Private: Local horeca provided coffee grit and acts as a customer for oyster mushrooms

Academic: Thomas More (Higher Education) provided [Space and Service Design students](#) that designed the mobile mushroom nursery and its services as part of their curriculum (2019-2020)

Social Enterprise: [Pronatura](#) executes berm management and provided another organic waste stream that was mixed with the coffee grit

Timescale

The action took place between Feb 2021 (building the ecosystem) and August 2022 (final evaluation of the SSA).

Resources required

The total cost of the action (set up costs) amounted to €45,000. Multiple sources were used to cover these initial costs, including:

- €10,000 from the URBACT Resourceful cities budget
- €5,000 from the city's Climate action fund donated to Citamine as seed money
- €10,000 from Citamine itself
- €9,000 from planned crowdfunding

Project inputs and resources required include:

Enthusiasm, perseverance and hard work of Citamine and its volunteers

Follow-up and support from city administration (1 day a month)

18 months of rent at the Impact Factory plus overheads

Investment in materials to set up the nursery, including an e-cargo-bike for logistics (total equipment costs: €40,000)

€1,000 for consultancy by Glimps (expert in bio-economy) in early stage of the project

Sourced equipment and materials through urban mining in a former hospital and local businesses worth about €3000

Communication and dissemination efforts

Results achieved

Early evaluation suggested that 35-40 tonnes of coffee grounds could be collected annually only from the current collection points. It has yet to be determined if the total amount can be valorised within the small scale mushroom nursery annually. The valorisation of the coffee grit and its transport by e-cargobike will result in a consequent avoidance of CO₂ production which has yet to be measured. Ten volunteers were involved in this test phase but this number is expected to greatly increase in the coming months. Participants in public workshops reported being inspired by the initiative (exact numbers to be measured in the final evaluation).

Key learning

The location where the participants wanted to start the mushroom nursery required a level of safety renovation works that was not foreseen. This seriously delayed the



process of setting up the oyster mushroom nursery but highlighted some key considerations to take into account in the planning and risk assessment of future projects. The final evaluation has yet to be completed, however during this test phase the business model will continue to be tweaked and adapted and we are hopeful that we can find a viable model of running a mushroom nursery that will be self-sustaining and will not require additional financial support.

Impact on the IAP

The learnings from the SSA will help to inform the IAP. The aim is that Coflab will continue to exist (once a viable business model is proven) acting as the first step in the development of a larger bio-incubator that develops solutions for organic waste streams in an experimental stage.

A sub-action will be included thus in the IAP to establish the biolab as part of the broader action of creating a circular community hub in the city centre of Mechelen. This central Urban Resource Centre called [Impact Factory](#) will host flexible office space (150 seats), a makers' lab and biolab, a restaurant, multifunctional event spaces, a concept store and exhibition space to accommodate impact entrepreneurs and collaborations with students, researchers as well as the neighbours and citizens of and visitors to Mechelen.

A word from the SSA team

“This has been a challenging but highly valuable experience. The learning gained & the opportunity to test and tweak the model is invaluable to us. We have a starting point now for developing the biolab as a space for bringing together entrepreneurs, citizens and civil society associations. We see an opportunity for facilitating greater collaboration between these groups who together have the potential to co-create innovative circular solutions. We want to support them to test these solutions as minimum viable products in an urban living lab setting to be ready for the sales market. It is true that if you want to go fast, go alone. If you want to go far, go together.”

– Julie Poppe, Circular Economy Programme Manager, City of Mechelen & Stefan Van Ouytsel, Co-Founder Citamine & Thom- as More Business Developer.

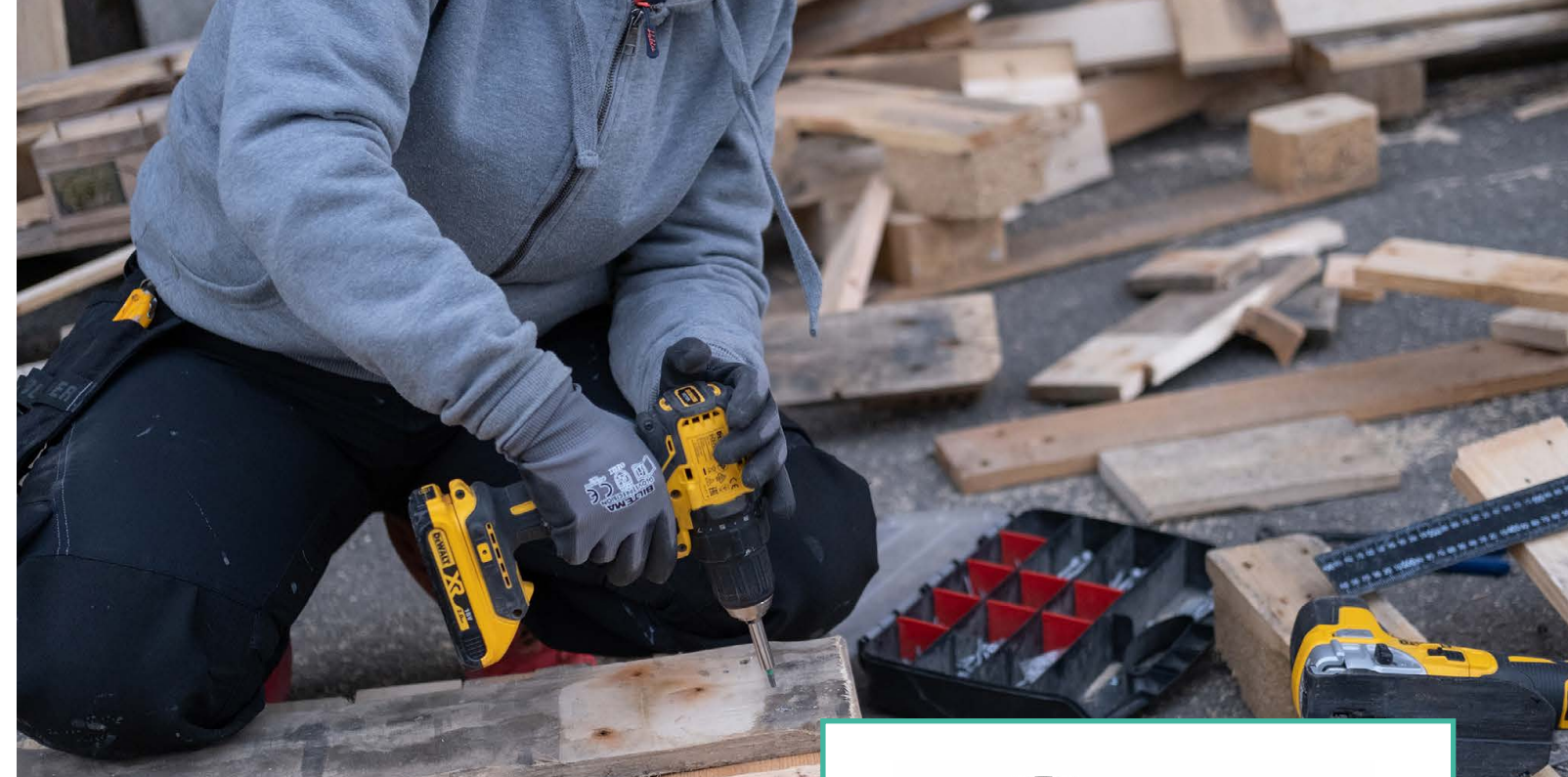
Further information

Citamine: Email: info@citamine.be

Website: <https://citamine.be/portfolio/coflab-oester-zwamkwekerij/>

Julie Poppe, Circular Economy Project Manager, City of Mechelen: Email: circulaireconomie@mechelen.be

Website: <https://www.mechelen.be/de-kwekerij-groeipl-ek-voor-een-mechelse-bio-circulaire-economie>



Oslo

9. Oslo

9.1 Testing a collaborative model for circular resource management in the Trosterud district of Oslo

Background

The aim was to test a model of collaboration for circular resource management in the Trosterud district in collaboration with the Norwegian Labour and Welfare Administration (NAV), local youths, a designer, local services and voluntary associations.

Where did the idea come from:

The city wants to establish a circular resource centre at an old barn in the Nedre Trosterud farm but a large amount of rehabilitation work is required. Rehabilitation and building permits are time consuming, which “forced” the city team and their stakeholders to think creatively and test ideas before the physical space is up and running.

The action aimed to reduce waste by prolonging the life of existing objects through reuse, redesign and repair activities. At the same time the action sought to support local work opportunities and job creation, while improving the attractiveness, vibrancy and safety of the environment for the local population at Trosterud district.

Objectives

The SSA sought to reduce waste and to test an operational model for a circular resource centre together with NAV, local youths, local services and voluntary associations. Furthermore it sought to involve the local community & secure citizen participation at an early stage in the development of a circular resource centre.

Location

The SSA took place in a barn at Nedre Trosterud farm in Alna northeast of the city, that will be transformed into a circular resource centre in the fall of 2022.

Institutions Involved

Lead organizations: [Alna City District](#) / [Områdeløft Trosterud og Haugerud](#), [Agency for Waste Management](#)

Key partners: Public: [Norwegian Labour and Welfare Administration \(NAV\)](#), Alna Cleaning and Technical Central Private: [Circular Ways](#)

Civil society: youths, [Stubberudlia](#) and [Fagerholt](#) Housing Associations, [Dr. Dedichens Green Square](#), [Friends of the Earth, Norway](#)

The champions were the young people hired through NAV who with limited practical experience, did an excellent job in building the outdoor bench from waste.

Timescale

October 2021 which included 2 - 3 weeks of preparation (procuring designer assistance, developing a design, buying tools and collecting materials) and 1 week building the bench.

Resources required

The cost of this action amounted to approx. € 8000 (most of it work hours for designer assistance) and it was financed through the regional innovation fund.

Resources included 350 kg of wood waste from the recycling station, 5 local youths employed through NAV, hired designer assistance, two work leaders from the municipality, a space, some tools (drill, sanding machine, nails), and a car for transport.

Results achieved

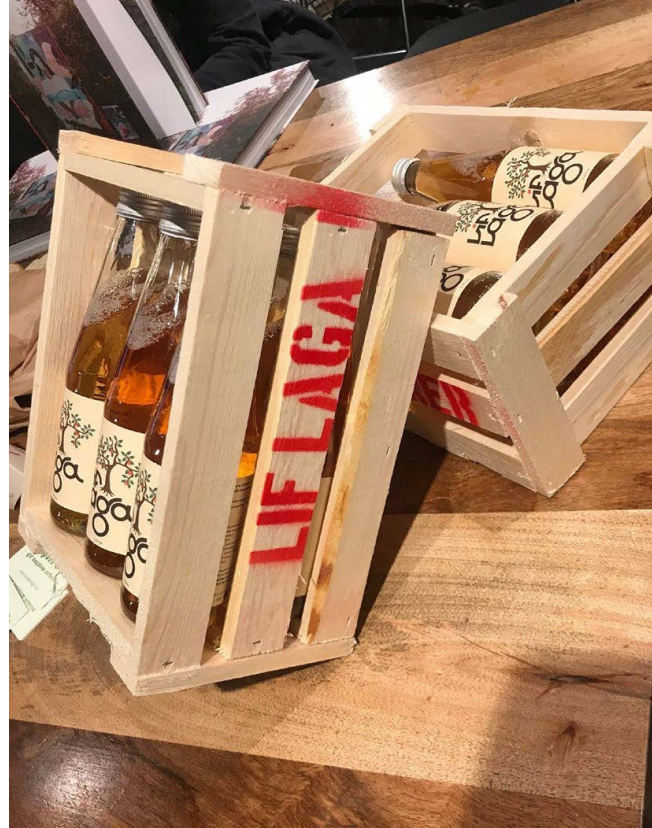
350 kg wood reused

5 youths employed (through NAV)

2 collaborations with local services and one with voluntary associations

Key learning

Through collaboration with NAV and other local partners in the autumn of 2021, the project gained a good basis for continuing the work of exploring and formalizing an operational model for a circular resource centre at Trosterud. The SSA confirmed proof of concept, and that it is possible

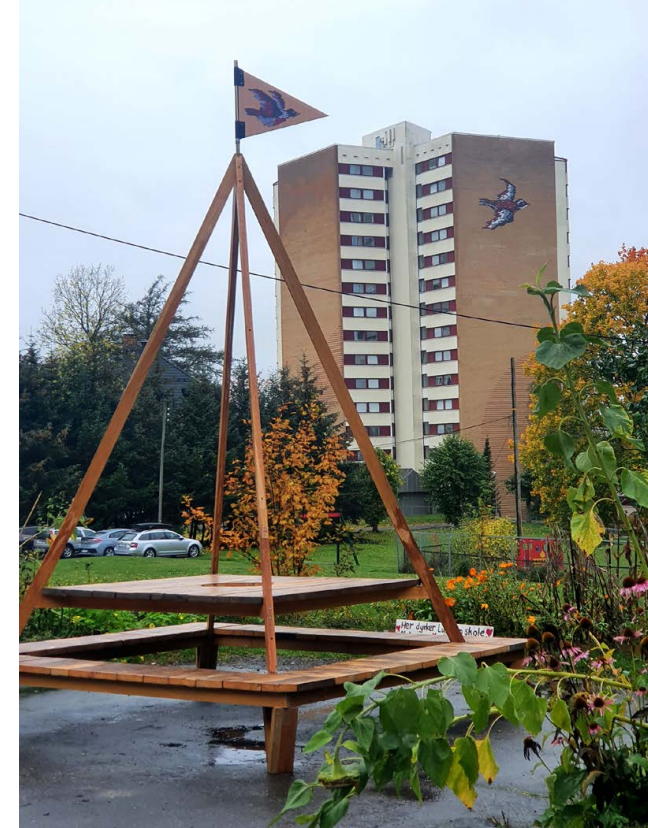


to achieve great results with limited time at hand and with limited resources. Designing and creating furniture from waste gives you a unique design and may even give you a better quality result than using new materials.

Impact on the IAP

The model will be upscaled as part of the operation of the circular resource centre at Trosterud in 2022.

As well as this the activities will be scaled up since as a result of the SSA, the participants have been asked to design and produce furniture for the new city district administration building in Alna City District. Youths will be hired to produce the furniture together with two external design companies. In addition to this assignment the the lead partners will procure designer assistance in order to redesign, repair and



use all of the surplus furniture and objects from the old city administration offices that would otherwise become waste, and use these to furnish the new administration building. The project will formalize an agreement with NAV in recruiting youths for the assignment.

The long term plan is to establish a production line of redesign and repair of furniture and offer job opportunities or work training as part of the circular resource centre at Trosterud. The project will continue to explore co-operation and co-location of a circular resource centre at Trosterud in collaboration with local services, voluntary associations and citizens.

A word from the SSA team

“This has been a really inspiring opportunity to see how new models of cooperation even on a small scale can have such wide ranging impacts, from waste reduction, skills ,development, job creation and social inclusion. It showcases in a practical way the opportunities that the circular economy provides”

– Kristine Einbu, Agency for Waste Management, Oslo Municipality.

Further information

[Trosterud park](#), [Områdeløft Trosterud og Haugerud](#).

9.2 Trialling the development of a new employment & training programme for young people, in the Stovner district, using the production of wooden crates from waste picked up at the recycling station

Background

The aim was to trial a solution that sought to limit waste by developing a circular product, and in addition to address the issues of social and occupational (work) exclusion among young people. The intention was to design an activity that would encourage young people to feel their value, to feel empowered and to experience that they can have an important role in both society and working life. By making the crates in a circular way, the young people will “learn by doing”, and see that it is possible to create sustainable products while earning an income.

Objectives

The SSA sought to limit waste, explore the potential of a market for a circular product and create more jobs and job opportunities for young people within the field of circular economy.

Location

The main activities took place in the District of Stovner, in the northeast in the City. Some activities such as collecting materials to be reused, took place at the recycling stations in other city districts, but close to Stovner.

Institutions Involved

Public: [Lif laga / Garden of Stovner](#), [ByKuben - Oslo Centre for Urban Ecology](#)

acted as the lead organisation

Key partners included:

Private: [Stovner Centre Citycon](#)

Public: The recycling station of [Agency for Waste Management](#), [Stovner High School](#), and the [Norwegian Labour and Welfare Organization \(NAV\)](#) and [Penal Care](#) (to recruit youths).

Civil society: Young people and youth groups ([the youth club Blokk 58](#)).

The champions were the young people engaged by Lif laga/ Garden of Stovner carrying out the practical work and selling the crates from Stovnerhagens own youth- operated store at Stovner Centre.



Timescale

January – December 2021.

Resources required

The total cost of this action amounted to approx. € 1950 and was funded by the municipality.

Resources included: Wood waste from recycling station, 15 youths employed, external designer assistance, one work leader, a space, some equipment, a car.

Results achieved

580 reuse boxes produced

15 young people employed during six weeks. 5 young people employed during three weeks. In addition, young volunteers run the store weekly - up to 4 days a week.

Key learning

The action proves this as a viable, impactful and well-functioning operational model for youth job creation, especially through good collaboration with the Norwegian Labour and Welfare Organization (NAV)) and Penal Care. The reused wooden crates have provided a practical means of raising awareness of the value of the circular economy and bringing it to life for young people. The resources were local, easily accessible and the results concrete. Many of the young people reported feeling inspired and some reported that they want to start their own business.

Impact on the IAP

Thanks to the success of this trial, Lif laga wants to further develop their circular products sold at their own youth-driven store at Stovner with a view to inspiring other city districts to replicate and scale up similar projects elsewhere. This will be reflected in the IAP.

A word from the SSA team

“What is so special about using the surplus materials from the recycling stations to make wooden crates for Askim, is that not only do we give the young people at Stovner valuable experience and understanding of circular economy and sustainability, we actually create jobs. I also like that we contribute to create a more sustainable society”

– Lucia Zazueta-Vicente (17) “

“I think the concept is very important, and that it has never been more important to think about sustainability than now, especially with regards to the climate challenges”.

– Lucia Zazueta-Vicente (17)”

Further information

[Lif laga](#), [Video link wooden crates production](#).

