



BORDERSTEP INSTITUTE
for Innovation and Sustainability
Science with Impact

Edible Cities Network Consulting Guidebook

**Support Structures for Urban Food Entrepreneurs
and Good Practices of Urban Food Initiatives**



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1 INTRODUCTION

Growing, processing, and distributing food in urban areas answers to a wide range of urban development goals such as provision of nutritious food, climate change mitigation and adaptation, as well as social inclusion and participation. New initiatives in cities around the world are being established, exploring different forms of agriculture and farming in urban areas. Together, they are building a global movement of Edible Cities, delivering products, services, and activities, which can be referred to as Edible City Solutions (ECS).

This guidebook introduces four cities from the Edible Cities Network – Berlin (Germany), Rotterdam (Netherlands), Oslo (Norway), and Andernach (Germany). Although situated in different parts of the world and characterised by diverse socio-economic contexts, these cities are at the forefront of developing cities that are edible. The guidebook highlights their development of urban agriculture practices and relevant municipal policies and strategies. Further, the guidebook showcases support structures and programmes that have been set up in these cities for edible city entrepreneurs and introduces good-practice examples of urban agriculture initiatives and their edible city models, presented with the Edible City Solutions (ECS) Canvas. You can find out more about the ECS Canvas in the [EdiCitNet Growing Jobs in Urban Agriculture Playbook](#).



EDIBLE CITY SOLUTIONS (ECS)

Edible City Solutions (ECS) are all forms of sustainable urban food production, distribution and use – from neighbourhood gardens, to urban beekeeping and sheep farming, green facades or high-tech indoor farming, cooking and dining events and the use of locally grown urban food in restaurants. ECS have the power to:

- make cities healthier, greener and more livable,
- create new green businesses and jobs,
- empower local communities to overcome social problems.

THE EDIBLE CITIES NETWORK (EDICITNET)

The Edible Cities Network (EdiCitNet) wants to make cities around the world better places to live through the implementation and institutional integration of Edible City Solutions. EdiCitNet is a global network of cities, initiatives and individuals that work together to promote sustainable urban food systems in urban areas around the world. Established in 2018 as an EU-funded project, its main goal is to share knowledge, best practices, and innovative approaches to urban agriculture and local food system innovations among its members. Here the network provides a platform for its members to connect, share knowledge and experiences, learn from each other as well as collaborate on and plan new projects.

Visit the Edible Cities Network Platform here: <https://ediblecitiesnetwork.com/>

2 EDIBLE CITY BERLIN

KEY DATA (2023)

Population	3,770,800
Area (km ²)	891.8
Population density (inhabitants/km ²)	4,214
Climate	Marine West Coast Climate
Average annual rainfall (mm)	669
Average low/high temperatures (°C)	6/13

OVERVIEW OF URBAN AGRICULTURE DEVELOPMENT IN BERLIN

Open and green spaces make up nearly 44 % of Berlin's land area.[1] However, it has been subject to fundamental changes quite often, redefining its face frequently and challenging the development of these green spaces. The aftermath of World War II - including the bombings, the division during the Cold War as well as the deindustrialisation and economic decline after the fall of the Berlin Wall - left lots of abandoned land behind. The required rebuilding of the city focused on the needs of cars rather than on the needs of people. The citizens of Berlin did not accept this post-war approach. In the late 1970s, urban activism evolved and triggered the consideration of public participation in the urban renewal process. This change of planning paradigm helped the reinforcement of urban agriculture.[2]

Around the same time, Berlin saw the development of more collective gardening projects such as children's farms which arose to strengthen local neighbourhoods. After the fall of the Berlin Wall, this movement was favoured as public or private occupation of available land could not be realised due to missing financial resources. The high unemployment rate was another factor that favoured the development of community gardens. Especially in the beginning, there were parallels to the urban agriculture movement in New York. Strengthened social cohesion, creative and participative use of available space as well as self-sufficiency especially for vulnerable groups became key principles defining Berlin's urban agriculture development. The demand for more nature in the city turned into a demand for more participative gardening, focusing especially on the community aspect of urban agriculture. For instance, Berlin has gone from eight community gardens in 2002 to over 200 community gardens in 2023.[3] [4]

URBAN FOOD POLICIES AND STRATEGIES

Berliner Ernährungsstrategie (Berlin's Nutrition Strategy)

The Senate Department for Justice and Consumer Protection first evolved the [Berlin Nutrition Strategy](#) in a participatory process in 2018, currently revising it to become Berlin's Nutrition Strategy 2.0 by the beginning of 2024. It consists of seven action fields highlighting different focus areas such as regional value creation, food waste reduction or nutrition education. Innovation also plays a key role in the transformation of the food policy, which is why the city aims to promote start-up and competence centres for sustainable food management.

Berlin gärtner (The Berlin Community Garden Programme)

Developed in a participatory process and passed by the Berlin Senate in January 2023, the programme [Berlin gärtner](#) supports existing community gardens in their diversity and promotes new community gardens.

Charta für das Berliner Stadtgrün (Charter for Berlin's Urban Green Space)

The Berlin Senate has committed to protect and support the sustainable development of green space in the city. With the charter, the Senate adopted an [action programme](#) for Berlin's green space by 2030. The programme contains concrete projects, measures, and instruments to meet the challenges formulated in the charter and to achieve the goals set. As part of the programme, the Senate aims to support citizens' engagement for urban green spaces.

Strategie Stadtlandschaft Berlin (Urban Landscape Strategy Berlin)

The [Urban Landscape Strategy](#) was adopted in 2011 and represents an action strategy for integration of Berlin's green and open spaces into its urban development. It focuses on further maintenance and profiling of green spaces and considers current challenges such as climate change, resource-efficiency, demographic change, and cultural diversity. Successful projects are the "urban tree campaign" and the "mixed forest programme", both enabling reforestation. "Productive Landscape" is one of the three guiding themes of the strategy, including different forms of productive use of green and open space such as allotments, focusing on participatory approaches to organisation of such spaces.

PROGRAMMES, NETWORKS AND COMMUNITIES SUPPORTING URBAN AGRICULTURE IN BERLIN

Feeding the City - Impact Hub Berlin

Impact Hub's Feeding the City programme is a six-month online incubator for Germany-based start-up teams with a vision to make food production and consumption more sustainable in urban areas.

Food Campus Berlin

Food Campus Berlin is a new physical and digital place that aims to act as transformation accelerator, building an entire ecosystem of start-ups, companies and science who work on innovative solutions for the food industry.

GründachPLUS

The state of Berlin has been promoting the greening of roofs on existing buildings since 2019. With the new edition of GründachPLUS in January 2023, facade greening is also part of the funding programme. There are two funding channels, one for regular projects and one for highly innovative, experimental and/or participatory projects.

Plattform Produktives Stadtgrün

Established as part of the Berlin Community Garden Programme, the platform Produktives Stadtgrün (Productive City Green) provides information about the multitude of over two hundred community gardens in Berlin and supports networking and active exchange.

Farm Food Climate - Companion Fund

Farm Food Climate is an initiative of Project Together gGmbH, enabling collaborative projects for positive impact in the food and agricultural system. With the Companion Fund, Farm Food Climate funds collaborative projects that involve at least two participants with 5000 EUR to develop ideas for climate-friendly transformation of food and agriculture into strong concepts and prototypes.

Ecosia - All-in for Berlin grant

In 2022, green search engine Ecosia launched the grant scheme "All-in for Berlin", awarding a total of 250,000 EUR to innovative climate and environmental initiatives in Berlin, including projects with a focus on urban greening and regenerative agriculture and forestry. The program has not yet been relaunched for 2023/2024, but interested initiatives are encouraged to follow up on the company's official announcements via their website.



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GOOD PRACTICE: HIMMELBEET COMMUNITY GARDEN (HIMMELBEET GMBH)

AT A GLANCE

- Community gardening project located in Berlin Wedding
- Established in 2012
- Area: 1400 m²
- Main purpose: Maintaining and creating green open spaces in cities through community gardening, focus on participation, self-organisation, environmental education and inclusion

HIGHLIGHTS

- Successful transfer to a new location in 2022
- On average, the former location (1700 m²) produced 1700 kg of food, absorbed 9000 l of heavy rain, and reduced and filtered 2 kg pollutants from the air (Source: www.gartenleistungen.de)

CONTACT

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<https://himmelbeet.de/>

mail@himmelbeet.de

VOICES FROM THE GARDEN

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The language café in the himmelbeet is a wonderful place in summer. Surrounded by lush greenery and buzzing bees and bumblebees, it's a little oasis in the city that invites you to get together in a peaceful atmosphere. We are a colourful group with different language levels. There is something for everyone, whether you are just starting to learn German or are at an advanced language level. We support each other.

- Participant of the language cafe at Himmelbeet

The himmelbeet is a great project that I have been visiting for three years, both at Leopoldplatz and now at Luisenbrücke. Himmelbeet is a nice place with a relaxed atmosphere and the neighbours come to meet each other. I go to the garden regularly.

- Gardener at Himmelbeet

”

GOOD-PRACTICE ECS: HIMMELBEET COMMUNITY GARDEN (HIMMELBEET GGMBH)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Himmelbeet Gemeinschaftsgarten is an intercultural community garden in Berlin run by non-profit himmelbeet gGmbH who also run the ElisaBeet, an educational garden with a vegetable patch.</p>		<p>02 VISION & MISSION</p> <p>The vision of Himmelbeet is a good life for all. It works to create more justice through access to education and healthy food, strengthen communities in the neighborhood, locally and globally, and to offer a perspective in times of global crisis, discussing topics such as the social transformation and the future of the city.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Social organisations engaged in social work with children, teens, and adults</p> <p>Neighbourhood initiatives and projects</p> <p>Cooperation partner of research organisations and other initiatives in research projects such as "Klima im Kiez" (climate in the neighbourhood), "Gartenleistungen" (garden ecosystem services)</p> <p>Supporter of the urban gardening manifesto, together with other initiatives such as Prinzessinnengarten, Kiezzgarten, Allmende-Kontor, Neuland Köln, Eine andere Welt ist pflanzbar, and Anstiftung.</p>	<p>08 KEY ACTIVITIES</p> <p>Cultivation and sale of vegetables (around 250 patches)</p> <p>Preparation of meals and drinks at the café such as homemade drinks and vegan-vegetarian dishes (not yet resumed due to move)</p> <p>Design and delivery of educational services such as gardening workshops and a gardening book in plain language</p> <p>Participation in and contribution to research projects</p> <p>Organisation of events such as baking days</p>	<p>03 VALUE PROPOSITION</p> <p>For people from the neighbourhood and citizens of Berlin in general, Himmelbeet provides access to urban greenery, local, seasonal and organic food as well as a space for environmental education and learning and participative urban gardening according to low-waste principles. It also fosters social interaction and social integration through design of inclusive activities and programmes, bringing together people from different backgrounds.</p>	<p>04 CUSTOMERS</p> <p>Citizens and neighbours</p> <p>Children</p> <p>Disadvantaged people</p> <p>Social organisations and local initiatives</p>	<p>05 COMPETITORS</p> <p>Other urban community gardens</p>
<p>11 COST STRUCTURE</p> <p>Maintenance and operational costs (garden and café)</p> <p>Costs related to the moving of the garden, including payments for special use permit</p>			<p>07 REVENUE MODEL</p> <p>Leasing of patches (around 125 EUR for 12 months)</p> <p>Sale of food and drinks at the café; sale of homegrown vegetables, herbs and young plants, as well as honey; horticultural orders for social organisations</p> <p>Public and private funding</p> <p>Donations</p>	<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Public and private funding associations: provision of finance</p> <p>Local municipality: provision of space and permits</p>



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GOOD PRACTICE: HOLYCRAB! (INWERT GMBH)

AT A GLANCE

- Food start-up specialised in production of foods made of locally sourced invasive species such as crayfish and crabs (invasive delicatessen)
- Started in 2017, founded in 2019
- Founders: Jule Bosch and Lukas Bosch

HIGHLIGHTS

- Jule and Lukas Bosch viewed the COVID-19 pandemic as a catalyst for their business model, shifting to become more impactful as they shifted from gastronomic services to commercial products that can be found at the supermarket. While the initial business model was based on serving streetfood with Berlin crayfish from Tiergarten park at a foodtruck and at dinner events, they have now established an on- and offline commerce with innovative products made from invasive species, thereby combining delicious food and nature protection
- Received numerous awards such as the German Gastrogründerpreis (Gastronomic Founders Award)

CONTACT

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hello@holycrab.berlin

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Focus on what's possible now. Every problem already has its solution built in already. Use your creativity to change perspectives and focus on possibilities, opportunities and synergies where others see only hurdles. Don't try to be perfect from the start - but start!

- Jule Bosch and Lukas Bosch, Founders, HOLYCRAB!



© HOLYCRAB!

GOOD-PRACTICE ECS: HOLYCRAB! (INWERT GMBH)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>HOLYCRAB! is run by Inwert GmbH, a company specialised in processing and marketing undervalued edible resources, thereby creating circular as well as regenerative business practices for the food industry. The HOLYCRAB! offer and business model has developed continuously since its establishment in 2019, starting off with offering streetfood and moving towards catering services and onto establishing on- and offline commerce with innovative seafood and fish products over the years.</p>		<p>02 VISION & MISSION</p> <p>The vision of HOLYCRAB! is to contribute to a regenerative economy and society by stimulating a change of perspective, working on development and production of food products.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Partnership with organic food producer J. Kinski to create food products such as crab broth</p> <p>Partnership with beer brewer Sebastian Sauer (Freigeist Bierkultur) to create drinks such as craft beer made using crayfish and oysters</p> <p>Commerce and marketing partners</p> <p>Scientists for further research and development</p>	<p>08 KEY ACTIVITIES</p> <p>Development, production, marketing, and sale of sustainable animal products, especially invasive and abundant species, including shellfish, crustaceans, and fish</p> <p>Consulting in the field of innovation and transformation</p> <p>Sale of book "ECONomy" about business practices for ecological regeneration</p>	<p>03 VALUE PROPOSITION</p> <p>For urban conscious consumers and "culinary connoisseurs", Holycrab offers products made from invasive species such as crabs, combining high quality and regional nutrition with nature conservation (culinary environmental protection), while turning fish and meat consumption into a benefit for the environment. It also stimulates regional value creation by creating local jobs and stimulates scientific discourse about biodiversity and climate adaptation.</p>	<p>04 CUSTOMERS</p> <p>B2C: non-vegetarian conscious consumers</p> <p>B2B: high-quality gastronomers</p>	<p>05 COMPETITORS</p> <p>Regional fish and seafood producers</p>
<p>09 KEY RESOURCES</p> <p>Team of varying size specialised in future and business design, fishery, wholesale, forestry, and culinary arts</p> <p>Invasive species such as the Red American swamp crayfish and camber crayfish</p> <p>Production plant and fishing equipment</p> <p>Online shop</p>				<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Water ecosystems such as lakes and the Baltic Sea ("the better we treat that ecosystem, the better we can generate value from it")</p> <p>Berlin Senate</p>
<p>11 COST STRUCTURE</p> <p>Operational costs such as salaries for employees, marketing expenses, shipping costs</p> <p>Investments such as production plant and fishing equipment</p>		<p>07 REVENUE MODEL</p> <p>Main revenue stream is the sale of products made of crayfish and other invasive and abundant species</p> <p>Another revenue stream comes from think- and do-tank activities such as giving presentations and talks</p>		



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GOOD PRACTICE: ÜBER DEN TELLERRAND IMKERN (ÜBER DEN TELLERRAND E.V.)

AT A GLANCE

- Intercultural beekeeping project for Berlin citizens as well as people new to Berlin
- Run since 2017 as a project of social organisation Über den Tellerrand e.V., itself established in 2014
- Initiator and beekeeper: Karsten Schischke

HIGHLIGHTS

- The first colony of bees was situated at Sharehouse Refugio, a social organisation with whom Über den Tellerrand Imkern partnered for a successful project launch
- Honey harvests are organised as community events involving the local neighbourhood

CONTACT

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In larger cities beekeeping serves multiple good causes: It is a great way of interacting with others across cultures, educates neighborhoods on honeybees, and pays off with plenty of honey, wax and other goodies from the hives.

- Karsten Schischke, Beekeeper, Über den Tellerrand Imkern



© Karsten Schischke

GOOD-PRACTICE ECS: ÜBER DEN TELLERRAND IMKERN (ÜBER DEN TELLERRAND E.V.)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Über den Tellerrand Imkern (Beekeeping beyond the Horizon) is one of several projects run by the association Über den Tellerand (Beyond the Plate). Since 2014, the Berlin-based social organisation facilitates cultural exchange through cooking programmes, but also other activities such as urban gardening and beekeeping. Its beekeeping initiative was founded in 2017 to bring together both experienced and unexperienced beekeepers and to enable interaction between Germans and people new to Germany, with and without experiences of displacement.</p>		<p>02 VISION & MISSION</p> <p>The vision of Über den Tellerrand Imkern is to contribute to social integration and a welcoming culture in Berlin. It works to create spaces that bring people together in beekeeping and food-related activities, while fostering cultural exchange and encouraging language acquisition.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Über den Tellerrand who enable project implementation and provide support through organisational orientation as well as provision of space such as the urban garden Inselgarten and the community and kitchen hub</p> <p>Deutsche Bahn (national railway company of Germany) who provide space for beekeeping free of charge in a former railroad area (close to Park am Berliner Gasometer), through their "Bees by the tracks" project</p> <p>Timewise cooperation with Familienimkerei Kiezbiene for development of own honey production line and distribution of honey</p>	<p>08 KEY ACTIVITIES</p> <p>Organisation of weekly meet-ups in the summer months to engage in beekeeping</p> <p>Production and marketing of honey</p> <p>Production of honey-related products, mostly for own use</p> <p>Networking and intercultural exchange</p>	<p>03 VALUE PROPOSITION</p> <p>Über den Tellerrand Imkern fosters social integration by enabling intercultural encounters and exchange and learning about nature for people from different backgrounds, as well as access to sustainable, locally produced honey and bee-related products. With its urban beehives, it also contributes to improved health of urban plants and crops through pollination.</p>	<p>04 CUSTOMERS</p> <p>Environmentally conscious consumers</p> <p>Beneficiaries: People from the neighbourhood, migrants</p>	<p>05 COMPETITORS</p> <p>Other initiatives engaged in social integration of migrants</p> <p>Other local honey producers</p>
<p>09 KEY RESOURCES</p> <p>Around 65.000 bees</p> <p>Beehives and beekeeping equipment such as protective suits</p> <p>Hobby beekeeper with more than 20 years of experience in beekeeping</p> <p>Group of volunteers</p> <p>Space for bee colonies (urban garden and unused space closeby)</p>				<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Bees</p> <p>Environment</p> <p>Sponsors</p>
<p>11 COST STRUCTURE</p> <p>Operating expenses, e.g., for equipment</p>		<p>07 REVENUE MODEL</p> <p>Sale of honey</p> <p>Donations</p> <p>Crowdfunding</p>		



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GOOD PRACTICE: ECF FARMSYSTEMS GMBH

AT A GLANCE

- Innovative company designing, building and operating aquaponic farms for sustainable food production in cities
- Established in 2012
- Founders: Nicolas Leschke, Christian Echternacht
- Subsidiary company: Frisch vom Dach GmbH

HIGHLIGHTS

- Established Europe's largest inner-city aquaponics farm in Berlin in 2014 on a 1.800 m² area and with yearly production of 450.000 units of "capital city basil" and 5 tons of "capital city perch"
- Planned and constructed the REWE GREEN FARMING supermarket in Wiesbaden, Europe's first supermarket with an integrated rooftop farm which went started operation in 2021
- Received the German Sustainability Award 2021 "Pioneer of change in the economy", and was awarded Best Start-up in the categories "Agriculture, Water, Waste" and "International" at the Cleantech Open in Silicon Valley in 2013

CONTACT

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GOOD-PRACTICE ECS: ECF FARMSYSTEMS GMBH

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>ECF Farmsystems was established in 2012 as a private limited company with the goal to build and operate scalable aquaponic farming systems to engage in sustainable, circular food production in urban environments. It built its prototype aquaponic farm in Berlin in 2014, which started production in 2015. Since then, it has built three further aquaponic farms across Europe.</p>		<p>02 VISION & MISSION</p> <p>The vision of ECF Farmsystems is to provide city dwellers with access to sustainably produced food and to produce high-quality food with less water consumption, less fertilizer and with significantly fewer transport routes and associated CO₂ emissions. Its mission is to change conventional business models by rethinking them and turning negative into positive impact through reducing resource use and fostering sustainable consumption patterns.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Raw material providers for fish and plants such as fish nurseries and producers of fish feed and seedlings</p> <p>Building construction companies</p> <p>Cooperation with Marktschwärmer (marketing of regional products) in Berlin which enables ECF Farmsystem to market and sell its produce online</p>	<p>08 KEY ACTIVITIES</p> <p>Planning and building of aquaponic farms (Brussels, Belgium and Bad Ragaz, Switzerland) as well as operation of aquaponic farms (Berlin and Wiesbaden, Germany)</p> <p>Development of innovative aquaponics technology, combining aquaculture circuits for fish farming with hydroponics circuits for plant cultivation</p> <p>Sale of produce (basil and perch) via click-and-collect-system on one day of the week</p>	<p>03 VALUE PROPOSITION</p> <p>ECF Farmsystems design, build and operate aquaponic farms for companies who strive to be sustainability pioneers by providing food with a low environmental footprint. For urban conscious consumers, ECF Farmsystems combine fish farming (aquaculture) and growing herbs and vegetables in water (hydroponics) to offer fresh regional produce in geographical proximity, with a smaller environmental footprint (reduced water and resource consumption).</p>	<p>04 CUSTOMERS</p> <p>Investors and developers of building-integrated aquaponic systems, e.g., BIGH</p> <p>Food wholesalers and retailers, e.g., REWE Group and ecco-jäger Früchte und Gemüse AG</p> <p>Berlin gastronomy and catering companies</p> <p>Urban conscious consumers</p>	<p>05 COMPETITORS</p> <p>Other companies active in technology-based urban farming such as indoor farming/vertical farming</p> <p>Fish and herbs producers/retailers</p>
<p>09 KEY RESOURCES</p> <p>Vacant (roof) areas</p> <p>Fish, seeds, water</p> <p>Production plants</p> <p>Employees</p> <p>ICT for monitoring of aquaponic operations</p>				<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Office space provider IGG Malzfabrik MbH who provide the area for the ECF Farm in Berlin</p> <p>Public authorities, e.g. to receive permits</p>
<p>11 COST STRUCTURE</p> <p>Operational costs (salaries for employees, utility expenses for water and energy, packaging, production material and technology, seeds and further resources)</p>		<p>07 REVENUE MODEL</p> <p>Main revenue stream is the design and building of aquaponic farms</p> <p>Further revenue streams are sale of produce to retailers as well as direct customers</p>		



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GOOD PRACTICE: ACKERPAUSE (ACKERCOMPANY GMBH)

AT A GLANCE

- (Office) gardening and urban farming concept developed by AckerCompany GmbH for companies, care facilities, and neighbourhoods
- Established in 2019
- Founders: Dr Christoph Schmitz, Dr Julian Siegmann
- Part of social organisation Acker e.V., specialised in nature education programmes for children and youth

HIGHLIGHTS

- Boasts a network of over 500 agricultural experts and is active at over 350 locations across Germany
- In 2023, Ackerpause offered more than 700 workshops and consultation sessions, empowering more than 4,000 people aged between 2 to 87 years to engage in urban farming activities. This resulted in more than 5,000 m² of arable land in Germany now being used sustainably and collectively, with more than 600 raised beds set-up and more than 25,000 young plants planted

CONTACT

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There is always more than one way to reach a goal, and in the search for a path, you usually unexpectedly find fellow campaigners with whom it is easier to reach the goal together.

- Dr Julian Siegmann



© Kathleen Gust

GOOD-PRACTICE ECS: ACKERPAUSE (ACKERCOMPANY GMBH)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>AckerCompany GmbH is part of Acker e.V. who offer educational food programmes for children and teens, such as school gardening. Since 2015, Christoph Schmitz, Acker e.V. founder and CEO, and Julian Siegmann who was responsible for operational management, scaling, and digitalisation at Acker e.V. for many years, tested various pilot programmes for educational food programmes for adults. In 2018, they finally launched the Ackerpause project, offering urban farming programmes for neighbourhoods and (home) office gardening programmes for companies and organisations, and in 2019, they officially founded AckerCompany GmbH.</p>		<p>02 VISION & MISSION</p> <p>Ackerpause shares its vision with that of umbrella organisation Acker e.V.: contributing to more appreciation for nature and food in society. The mission of Ackerpause is to create unique experiences for urban tenants, neighbourhoods, and employees, through positive urban farming and office gardening experiences.</p>		
<p>08 KEY ACTIVITIES</p> <p>Development of concepts for sustainable cultivation of vegetables, taking into account technical, natural, and social factors</p> <p>Procurement and provision of gardening materials and equipment such as seeds, plants, berry bushes, water tanks, tool sheds, etc.</p> <p>Management and coordination of start of the seasons with urban residents, also providing communication material</p>	<p>On-site as well as digital guidance of urban residents and transfer of urban gardening knowledge, including organisation of interactive workshops and harvest festivals as well as regular consultation sessions</p> <p>Evaluation of experiences to improve offer</p> <p>Development of digital app which functions as an organisational and knowledge tool for urban residents, also providing recipes and a chat function</p> <p>Design and delivery of Ackerpause team events and workshops on the topics of urban gardening and healthy eating (2-6 hour workshops)</p>	<p>03 VALUE PROPOSITION</p> <p>For companies, care facilities, and housing associations that want to enhance their employees' working experiences and residents' living experiences, AckerCompany GmbH offers its Ackerpause urban farming and (office) gardening programmes and services, fostering a sense of togetherness in neighbourhoods, an improvement of the quality of work and life in care facilities and “work-plant-balance” in companies, empowering people to actively engage with their immediate environments through sustainable practices, while benefiting the companies', care facilities' and associations' engagement and communication efforts.</p>	<p>04 CUSTOMERS</p> <p>Companies (beneficiaries: their employees)</p> <p>Housing associations and management companies (beneficiaries: their tenants)</p> <p>Care facilities (beneficiaries: their employees and residents)</p>	<p>05 COMPETITORS</p> <p>Other urban farming projects such as neighbourhood allotment gardens</p> <p>Other health promotion projects with a focus on nutrition</p>
<p>10 KEY PARTNERSHIPS</p> <p>Suppliers of gardening materials and equipment</p> <p>Health insurance providers such as AOK to support and/or finance Ackerpause office gardening programmes as workplace health promotion measures for companies</p> <p>Cooperation with Kraaibeek (developer of workplace health promotion programmes) in design of Ackerpause products and services</p>	<p>09 KEY RESOURCES</p> <p>Team, including field coaches (Ackercoaches) who support and empower urban residents with know-how in agriculture and nutrition</p> <p>Gardening equipment and materials (raised beds, seeds, soil, etc.)</p> <p>Acker starter-sets for home office gardening</p> <p>Mobile application</p>	<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>German Environmental Foundation (DBU Deutsche Bundesstiftung Umwelt) who provided financial and ideational support through their Green Start-up Programme</p> <p>Urban environment</p>		
<p>11 COST STRUCTURE</p> <p>Operational costs (salaries for employees, gardening equipment, materials for Acker starter sets, etc.)</p>		<p>07 REVENUE MODEL</p> <p>Main revenue stream: provision of services such as planning, implementation, and evaluation of urban farming and (office) gardening projects, including site analysis and integration into existing use plans, crop planning, preparation of land and setting up of beds, procurement of gardening materials and young plants, expert guidance and training</p> <p>Further revenue stream: provision of services such as team events and workshops, sometimes in combination with rental services (office and workshop spaces)</p>		

3 EDIBLE CITY ROTTERDAM

KEY DATA (2023)

Population	663,900
Area (km ²)	324.1
Population density (inhabitants/km ²)	2,995
Climate	Marine West Coast Climate
Average annual rainfall (mm)	880
Average low/high temperatures (°C)	3/17

OVERVIEW OF URBAN AGRICULTURE DEVELOPMENT IN ROTTERDAM

The region of Rotterdam offers many different agricultural production areas such as dairy, arable crops or greenhouse horticulture production. Besides, it is characterised by its port which enables not only the import but also processing of food.[5] Despite its long-standing tradition of gardening and food production, there was a lack of access in the past for Rotterdam city dwellers. A mismatch of interests and yet existing but ignored landscapes was detected, forcing the municipality, citizens, and associations to develop new strategies. Urban agriculture became the answer.[6] Based on a programme of the Ministry of Agriculture, Nature and Food Quality, a group of experts in urban agriculture was formed in 2008 and created the initiative Eetbaar Rotterdam (Edible Rotterdam). Since then, it provides relevant information, and enables projects and networking. From their roots emerged the project Uit je eigen Stad (From your own city), one of the biggest urban agricultural initiatives in the Netherlands: a commercially operated urban farm on abandoned land. The project was inspired by the concept of the US-American NGO Growing Power and operated until 2018, when it struggled to achieve financial independence.[7]

In 2010, a think tank on urban agriculture was established, enabling more visibility and integration of urban agriculture into local policies. Its most important themes are public health, sustainable economy, and spatial quality. Nowadays, the urban agricultural landscape in Rotterdam is mainly characterised by entrepreneurial initiatives offering quite a variety of approaches: sale of farm-produced products, care farms, recreational facilities, regional production, and direct supply to regional restaurants and shops. Especially the latter experienced a strong growth, favoured by the growing trend of conscious consumers. Topics such as Slow Food have also arrived to Rotterdam. The region of Midden-Delfland is part of Cittaslow, an international network of municipalities creating regional products to preserve authentic landscapes. Nowadays, Rotterdam counts more than 200 local initiatives in urban agriculture, also using urban food and agriculture to foster its city branding.[8][9][10][11]

URBAN FOOD POLICIES AND STRATEGIES

Food & the City: Stimulating urban agriculture in and around Rotterdam

Rotterdam has been building a food policy gradually. Throughout the years, the municipality provided support for bottom-up community initiatives, encouraging the special combination of citizens' initiative and entrepreneurship and maintaining the spontaneous character of urban agriculture. In 2012, it was the first Dutch city to publish its own food strategy. In [Food & the City](#), it formulates guidelines for rolling out urban agriculture in Rotterdam. Focus areas include improvements in health, sustainable economic development, and improvements in spatial quality. In 2013, the launch of the Rotterdam food council followed. The network organisation defined short food supply chains, circular economy, and education as its key focus topics.

Stadslandbouw (Urban Agriculture Netherlands)

Rotterdam is member of [Stadslandbouw](#), a national urban food platform with the aim of bringing together urban food actors to exchange knowledge and experience in urban agriculture and support learning through regional living labs. The network of cities is run in cooperation with the Ministry of Economic Affairs, Agriculture, and Innovation, which deals with the cities' roles in production and sale of food.

Rotterdams WeerWoord (Rotterdam WeatherWord)

60 % of the space in Rotterdam is privately owned, thus climate adaption requires participation and commitment from everyone. Formed by the municipality of Rotterdam and regional water boards, agencies and suppliers, the initiative [Rotterdams WeerWoord](#) aims to stimulate both policy, business and civil society to get active in establishing climate-adaptive measurements to prepare for more extreme climate and contribute to creating a climate-proof city. This includes encouraging citizens to adapt their houses, gardens, balconies, and streets, for instance through greening. Citizens may apply to Rotterdams WeerWoord for subsidies, for instance the Climate Adaptation Grant (see Climate Adaptation Grant).

Rotterdam gaat voor groen (Rotterdam Goes Green)

In its quest to create more greenery and water storage in the city, the city of Rotterdam set up the action programme [Rotterdam gaat voor groen](#), aiming to add 20 hectares of green space in four years. Between 2018 and 2022, it surpassed its goal, adding 21.5 hectares of greenery in public spaces, neighbourhoods, working spaces, and on roofs. The programme was extended for the time period 2023-2026 to add an additional 20 hectares of greenery.

PROGRAMMES, NETWORKS AND COMMUNITIES SUPPORTING URBAN AGRICULTURE IN ROTTERDAM

Verbind groen 010

Verbind groen 010 is a collaborative initiative of Groen010, De Groene Connectie, and Coöperatie Tussentuin which aims to foster networking between initiatives in urban greening in Rotterdam and to highlight the social, connective, innovative, and educational aspects of urban greenery. One of its key offers is a digital map of green initiatives in the city, aiming to make visible the more than 150 organisations and projects that contribute to social and green living environments through edible greenery, allotments, collective courtyards and nature-based projects. It serves as a source of inspiration and is openly accessible, inviting citizens to add their engagement.

Blue City

Founded in 2015 in a vacant swimming pool building, Blue City is the city's hub for entrepreneurs working on visions of a circular economy. Its vision is to accelerate the transition from the linear to the circular economy through entrepreneurship. Home to 55 entrepreneurs as of 2023, Blue City offers workspaces, different kind of labs and production spaces as well as business programmes to support entrepreneurs and small-scale initiatives to develop their business ideas into scalable products or processes. Blue City hosts enterprises such as Rotterzwam who grow oyster mushrooms on residual products such as coffee grounds and coffee peels.

Climate Adaptation Grant

Residents, companies, and organisations can apply for the Climate Adaptation Grant provided by Rotterdams WeerWoord (see above) which funds initiatives for more greenery and collection of rainwater on existing buildings. The amount of funding depends on the vegetated area, the amount of water collected as well as the number of plants. Applicants should consider required minimum surface areas as well as the minimum maintenance duration of 5 years. The maximum amount of funding provided is 40.000 EUR per application. New construction projects are excluded from the grant.

CityLab010

The start-up programme CityLab010 is dedicated to funding innovative ideas that make Rotterdam greener, safer, and more social. The programme takes place annually from April to September, providing up to 50.000 EUR of funding and offering participants personalised consultations, workshops, and networking opportunities. CityLab010 is a collaboration programme between the municipality of Rotterdam and partners such as Rabobank, Ploum, Mazars and Rotterdam University of Applied Sciences.

Opzoomer Mee Rotterdam Foundation

The Opzoomer Mee Foundation supports ideas to create greener, safer, and more social neighbourhoods in Rotterdam. For instance, through its "More Green" programme it funds the neighbourhood initiatives with up to 500 EUR for greening the city. Next to climbing plants, tree beds, and green balconies, it funds actions to create vegetable, fruit, herb, and facade gardens. For vegetable gardens, Opzoomer Mee Foundation contributes a maximum of 25 euros per m², and for senior gardens for elderly people a maximum of 35 euros per m².

RMC Rotterdams Milieucentrum (Rotterdam Environmental Centre)

The Rotterdam Environmental Centre aims to contribute to making Rotterdam a green, environmentally-friendly, and safe city. It supports green citizens' initiatives and organises the Rotterdam Park Consultancy and the Rotterdam Park Month. It offers consulting to the municipal council on the topics of urban nature, climate policy, spatial planning, and waste policy. It also hosts Slimdak010, a test site for smart water storage on the the urban rooftop farm DakAkker. One of its flagship programmes is Dakennie, a rooftop educational programme teaching primary school children in Rotterdam about urban agriculture, green roofs, and healthy food.



© Floating Farm

GOOD PRACTICE: FLOATING FARM (FLOATING FARM HOLDING BV)

AT A GLANCE

- Self-sufficient dairy farm built on water in the Port of Rotterdam
- Floating Farm Entity established in 2015, start of construction of first farm in 2018
- Founders: Minke van Wingerden & Peter van Wingerden
- 2000 m² area for cows, manure and dairy processing, and water filtering technologies

HIGHLIGHTS

- In 2020, extension of business model from B2B to B2C platform due to global pandemic, including opening of an official store as well as a webstore
- Since 2021, development of a second Floating Farm, specialised in production of eggs and vegetables, and located next to the first farm in Rotterdam
- Replication plans of the floating farm concept in other cities around the world

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Never give up! Besides producing fresh healthy food for the city we are also a social hub where city dwellers love to be part of.

– Minke van Wingerden, Founder of Floating Farm



© Floating Farm

GOOD-PRACTICE ECS: FLOATING FARM (FLOATING FARM HOLDING BV)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Witnessing the devastating effects of disasters such as disruption of local food supply, Floating Farm was established in 2015 in Rotterdam as a concept for building urban food production facilities on water. The concept builds on Rotterdam’s development of floating elements, as 90% of the city lies below sea level. Floating Farm established its first self-sufficient floating dairy farm in 2018, employing circular agricultural methods such as production and use of renewable energy, and recycling of rainwater and production residues of local companies as animal feed.</p>		<p>02 VISION & MISSION</p> <p>The vision of Floating Farm is to contribute to the sustainability and long-term resilience of all cities by making our food chains less vulnerable to climate change, especially flooding, and to relieve pressure from the environment through reduction of food waste and transportation. Its mission is to foster localisation through the scalable floating farm concept to bring food production close to consumers while creating awareness about healthy and sustainably produced food.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Knowledge cooperation with universities such as TU Delft, Wageningen University & Research, and HAS Hogeschool</p> <p>Sourcing of animal feed from urban residual waste-streams such as orange peels through local businesses such as beer-breweries (e.g. Stadshaven Brouwerij), bakeries, and golf courses</p> <p>Manufacturers of equipment for livestock such as Lely and Agrifirm</p> <p>Provision of animal feed and energy through Alco Energy Rotterdam, largest biorefinery in Europe</p> <p>Retailers</p>	<p>08 KEY ACTIVITIES</p> <p>Development and implementation of climate adaptive infrastructure</p> <p>Circular production with closed nutrient, energy, and water cycles to recover minerals and other nutrients</p> <p>B2B and B2C sale of milk, yoghurt, butter, and cheese</p>	<p>03 VALUE PROPOSITION</p> <p>For urban conscious consumers who value environmentally- and animal-friendly local products, Floating Farm’s dairy products focus on increased resilience of food supply in cities and reduction of food waste. Unlike far-travelled dairy products, day-fresh Floating Farm products empower local businesses, create educational value, and strengthen alternatives to limited rural farmland.</p>	<p>04 CUSTOMERS</p> <p>Shops and restaurants sourcing locally and sustainably produced food</p> <p>Urban mindful consumers</p> <p>City of Rotterdam who buy organic fertilizer for their parks</p>	<p>05 COMPETITORS</p> <p>Producers of local and sustainable dairy produced on land</p> <p>Modularity of the floating farm concept provides a competitive advantage in comparison to land-based buildings</p>
	<p>09 KEY RESOURCES</p> <p>Around 40 cows producing healthy milk and organic manure</p> <p>Core team of 14 employees as well as a team of volunteers who support farm and shop activities</p>			<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Aquatic species living in the affected habitat in the port</p> <p>Visitors interested in sustainable food production and liveable cities: city designers, students, ministers</p>
<p>11 COST STRUCTURE</p> <p>Maintenance costs, animal feed, energy supply not covered by self-generation, transportation costs, marketing costs (online shop, events)</p>		<p>07 REVENUE MODEL</p> <p>Transactional and retail: direct and online sale of dairy products and fertilizer, educational workshops</p>		



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GOOD PRACTICE: STICHTING DE DAKAKKER (DAKAKKER FOUNDATION)

AT A GLANCE

- Rooftop farm growing vegetables, edible flowers, and fruit, and keeping bees
- Opened in 2012
- Operated by Rotterdam Environmental Centre (Rotterdams Milieucentrum)
- Founder and manager: Wouter Bauman, co-founder: Emile van Rinsum
- 1000 m² area

HIGHLIGHTS

- Every year, thousands of visitors get to know the rooftop farm and around 160 excursions take place
- In 2021, during the first European Rooftop Farmers Meetup, DakAkker founders Wouter Bauman and Emile van Rinsum were awarded the Roof Heroes 2021 prize
- With time, build-up of knowledge and experience around optimising substrate for vegetable gardens on rooftops by adapting amount of nutrients to the needs of the cultivated crops
- In 2017, construction of two worm hotels to produce worm compost for own use and sale
- In 2018, a test site for smart water storage and management (Slimdak – clever rooftop) that buffers seven times more water than a normal green roof was installed at DakAkker as a climate adaptation measure. Funded through the CityLab 010 programme, it serves as inspiration for project developers and building owners

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Keep faith in your mission and stay flexible by responding to opportunities that arise.

- Wouter Bauman, Rooftop Farmer at DakAkker



© Eva Meylink

GOOD-PRACTICE ECS: DAKAKKER (STICHTING DE DAKAKKER)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>DakAkker is the largest open-air roof farm in the Netherlands and one of the largest rooftop farms in Europe. Established in 2012, it includes a smart-roof test site for water collection and management, while growing vegetables, edible flowers, and fruit and keeping roof bees. It is located on top of the Schieblock in Rotterdam, a former office building that evaded demolition plans and was turned into a multifunctional site home to creative and collective projects and workspaces. It was established as an initiative of architecture agency ZUS (Zones Urbaines Sensibles) and the Environmental Centre Rotterdam (Rotterdams Milieucentrum) and other partners in the context of the Luchtsingel project, a pedestrian bridge that represents the world's first piece of crowdfunded public infrastructure and links and revives three public spaces in Rotterdam.</p>			<p>02 VISION & MISSION</p> <p>The vision of the rooftop farm DakAkker is to grow, learn and contribute towards sustainable and green cities of the future. Its mission is to show the many possibilities of food production on flat roofs and contribute to climate protection, climate change adaptation through water capture, combating heat stress and reducing food miles by producing food closer to customers. It also serves as a green recreational and educational space for city dwellers.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Optigrün, manufacturer of rooftop vegetable garden substrate</p> <p>Cooperation with HEEM, a Dutch organisation committed to applying natural vegetation in urban landscapes, in growing herbs and native plants in the small botanical garden "Heemtuin"</p> <p>Restaurant chain TEDS who operate the rooftop restaurant using fresh harvest from the rooftop garden</p> <p>Retail partners such as Dille & Kamille and Stadstuinwinkel Stek in Rotterdam</p> <p>Online marketplaces such as Ecomondo</p> <p>Sponsors of the smart roof</p>	<p>08 KEY ACTIVITIES</p> <p>Urban farming and production of food and worm compost</p> <p>Beekeeping and production of honey</p> <p>On-site as well as online sale of products to local companies and at festivals</p> <p>Distribution of produce, e.g., edible flowers to six restaurants in the immediate vicinity of DakAkker</p> <p>Tours and excursions for groups of up to 30 people</p>	<p>03 VALUE PROPOSITION</p> <p>DakAkker enables urban residents to engage in as well as taste the benefits of local sustainable food production and experience nature and biodiversity in the city. The rooftop farm also functions as a learning space that helps people to develop knowledge about the role of urban farming for sustainable and resilient cities and gain more in-depth understanding about regulation of the urban climate. As a smart roof, DakAkker can hold up to 60,000 litres of excess water from heavy rainfalls, representing an important urban site for climate change adaptation.</p>	<p>04 CUSTOMERS</p> <p>Local restaurants and hotels</p> <p>Conscious urbanites</p> <p>School children who visit the DakAkker during excursions</p> <p>Companies</p>	<p>05 COMPETITORS</p> <p>Other urban food producers</p>	
	<p>09 KEY RESOURCES</p> <p>Farm manager, rooftop farmer and beekeeper: Wouter Bauman (nature and spatial planning consultant at the Rotterdam Environmental Center and beekeeper affiliated with the Ambrosius Beekeepers Guild)</p> <p>Large group of volunteers</p>	<p>Organic seeds, planting material, farming equipment</p> <p>Worms</p> <p>Chicken</p> <p>Honeybees for ensuring pollination on DakAkker, six beehives</p> <p>Smart water technology</p>		<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Financial supporters for educational programmes: Watersensitive Rotterdam, municipality of Rotterdam, and the Waterboard Hoogheemraadschap Schieland en de Krimpenerwaard</p> <p>Building owner: municipality of Rotterdam</p> <p>Building manager : VPS</p> <p>Building users</p>	
<p>11 COST STRUCTURE</p> <p>Maintenance costs, salaries for employees, costs for gardening and gastronomic equipment</p>			<p>07 REVENUE MODEL</p> <p>Transactional and retail: sale of produce, e.g., Rotterdamse Schieblock Honey, educational tours, consultancy services, rental services</p>		



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GOOD PRACTICE: ROTTERZWAM (ROTTERZWAM BV)

AT A GLANCE

- Company involved in the reuse of coffee grounds for cultivation and further processing of oyster mushrooms and snacks
- Founded in 2013
- Director and founder: Mark Slegers, co-founder: Siemen Cox
- Capacity for 80,000 kg of coffee grounds, processed annually into 13,000 kg of mushrooms

HIGHLIGHTS

- Since 2021, Rotterzwam has been a certified B Company. In 2022, it was among the Top 5 in the world in the Environment category of B-Corp. Rotterzwam saves around 70 tons of coffee residue every year and produces approximately 4,000 kg of mushrooms. It shares as much real-time data as possible here: <https://www.rotterzwam.nl/pages/impact>
- Winner of the Urban Agriculture Award in 2014, winner of the Marketing Award 2016 of the municipality of Rotterdam, and in 2022 winner of the Vegan Award – Organization category
- In 2015, one of the very first customers, a pastry chef, used the oyster mushrooms for the production of Bitterballen and other vegan snacks, which started the development of a range of snacks
- After a fire broke out near its former office and production facilities at Blue City, Rotterzwam moved to a new location in 2018/2019, where a nursery in used containers was set up through crowdfunding
- Development of the Rotterzwam Growkit that allows people to produce mushrooms at home, with more than 100,000 sold

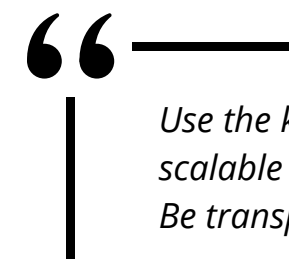
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Use the knowledge of experienced pioneers. Work towards a scalable concept, because ultimately that is the key to success. Be transparent and ask for help.

- Mark Slegers, Director and Founder, Rotterzwam



© rotterzwam

GOOD-PRACTICE ECS: ROTTERZWAM (ROTTERZWAM BV)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Rotterzwam is a private company based in Rotterdam that specializes in the cultivation of oyster mushrooms using the local organic waste stream of coffee grounds. They offer a range of products and services related to this mushroom production, snacks based on vegetable proteins and creating awareness about circularity economics themes.</p>		<p>02 VISION & MISSION</p> <p>The vision of Rotterzwam is a society that closes loops, uses raw materials efficiently and to the maximum of their potential, and consumes more plant-based than animal proteins. Its mission is to work towards the circular economy with a range of local, regional, and international partners through developing and facilitating mushroom production from local residual flows.</p>								
<p>10 KEY PARTNERSHIPS</p> <p>Collaboration with bakeries for production of oyster mushroom croquettes and bitterballen, for example Bakkerij van der Heijden</p> <p>Collaboration with Vet & Lazy brewery for production of oyster mushroom beer</p> <p>Collaboration in the field of mushroom cultivation with Ekofungi in Serbia</p> <p>Cooperation with universities and research institutes, for example with Wageningen University & Research and the Louis Bolk Institute that studies the impact of coffee grounds on soil</p>	<p>08 KEY ACTIVITIES</p> <p>Weekly collection of coffee grounds from customer organisations</p> <p>Processing coffee grounds into substrate and cultivation of oyster mushrooms, organic fermentation of the remaining coffee grounds</p> <p>Food production based on oyster mushrooms (e.g., bitterballen and croquettes) and distribution of products</p> <p>Design and implementation of educational activities such as workshops, online training, and the Mushroom Master Programme and the provision of cultivation facilities for urban mushroom cultivation</p> <hr/> <p>09 KEY RESOURCES</p> <table border="0"> <tr> <td>6 employees, 1 designer, 2-3 interns and several volunteers</td> <td>Production facilities including solar panels</td> </tr> <tr> <td>Coffee grounds</td> <td>2 electric buses for collection of coffee grounds</td> </tr> <tr> <td>Online shop</td> <td></td> </tr> </table>	6 employees, 1 designer, 2-3 interns and several volunteers	Production facilities including solar panels	Coffee grounds	2 electric buses for collection of coffee grounds	Online shop		<p>03 VALUE PROPOSITION</p> <p>Rotterzwam offers urban conscious consumers who appreciate healthy, sustainable food the possibility to consume locally produced mushrooms and snacks while providing people with knowledge about sustainable food production and circular economy principles, and empowering individuals as well as organisations to create sustainable impact, by repurposing the resource coffee grounds which would be incinerated otherwise. Organisations in the Rijnmond region get to internalise a part of their waste costs and avoid passing on their waste to society and the environment.</p>	<p>04 CUSTOMERS</p> <p>B2C via webshop: environmentally conscious consumers, motivated to create impact at home and try out new forms of agriculture</p> <p>B2B distribution of processed foods: nutrition retailers (restaurants, catering, farmers markets) looking for alternative vegetable products and interested in the circular economy</p> <p>More than 20 organisations from the Rijnmond region committed to creating a positive impact by passing on their coffee grounds for collection by Rotterzwam, for example Lely, TU Delft, Arcadis, Blue City, Priva, and more</p>	<p>05 COMPETITORS</p> <p>Product developers who use coffee grounds as a means for production</p> <p>Suppliers of meat substitutes made from vegetables</p> <p>Companies that promote storytelling and sell a nice story, but offer an existing product or service that is not or less circular</p> <hr/> <p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Environment: reduction of greenhouse gas emissions, resource loss and pollution, feeding the soil with organic matter</p>
6 employees, 1 designer, 2-3 interns and several volunteers	Production facilities including solar panels									
Coffee grounds	2 electric buses for collection of coffee grounds									
Online shop										
<p>11 COST STRUCTURE</p> <p>Operating costs (rent, employee salaries, software, etc.), advertising and marketing costs, distribution and shipping costs, costs for maintenance of production facilities</p>		<p>07 REVENUE MODEL</p> <p>B2C sale of oyster mushroom products, mushroom grow kits, and other related products (online shop), sale of educational services such as tours, trainings, workshops, and master programmes</p> <p>Services: B2B coffee grounds collection packages starting at 84 EUR per month; keynote speeches</p> <p>Crowdfunding helped secure funding in the early phase</p>								

GOOD-PRACTICE ECS: VOEDSELTUIN ROTTERDAM (FOOD GARDEN ROTTERDAM)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Voedseltuin Rotterdam (Food Garden Rotterdam Foundation) is a social initiative running a community garden that was launched in August 2010 on a 7.000 m² vacant plot of land in the Rotterdam harbour area. The urban garden was originally established to produce vegetables and fruit for the Food Bank Rotterdam, an organisation that provides free food packages to low-income households, and now also serves other social organisations.</p>		<p>02 VISION & MISSION</p> <p>The vision of Voedseltuin Rotterdam is an inclusive and sustainable urban society without poverty and social exclusion, and with healthy food for everyone. Its mission is to supply social initiatives with fresh and healthy food, while offering less self-reliant citizens opportunities for healthy activities aimed at integration.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Collaboration with people active in the urban gardening network such as René van der Goes who supplies young plants to the Food Garden</p> <p>Collaboration with work experience center Pluspunt whose visitors can cook with the Food Garden's fresh harvest as well as work at the Food Garden as another activity</p> <p>Collaboration with landscape architecture firm LOLA to further develop the Food Garden into a food park and forest</p> <p>Collaboration with environmental architects The Urbanists and Watersensitive Rotterdam on the "sponge laboratory" to learn about climate-proof cities and the natural principles between water, soil and vegetation</p> <p>Collaboration with bee keepers Imkerij Natuurbij who have placed four of eight hives in the Food Garden</p> <p>Collaboration with initiatives and organisations in the neighbourhood, e.g., AVL Mundo Foundation in circular art and culture</p> <p>Collaboration with local schools</p> <p>Job center or other platforms for unemployed citizens</p>	<p>08 KEY ACTIVITIES</p> <p>Production of sustainable and seasonal vegetables as well as (medicinal) herbs</p> <p>Design and delivery of educational activities such as workshops on permaculture, gardening, and healthier living</p> <p>Organisation of events such as the Annual Harvest Festival</p> <p>Participatory design of the food garden and area plan with users and other stakeholders</p>	<p>03 VALUE PROPOSITION</p> <p>For people in need of food the Food Garden Rotterdam provides sustainable and seasonal fruit and vegetables that focus on social inclusion and reducing social inequality by providing people who are distant from the labour market the opportunity for reintegration and empowerment for the job market through ecological gardening which improves local biodiversity.</p>	<p>04 CUSTOMERS</p> <p>Beneficiaries: Users of the Food Bank and other social projects such as Pluspunt Rotterdam, Islamic Food Bank and WMO Radar</p> <p>Further beneficiaries: People and organisations from the neighbourhood (M4H Rotterdam) as well as Rotterdam residents</p>	<p>05 COMPETITORS</p> <p>Other community gardens</p> <p>Other initiatives addressing unemployed citizens</p> <p>Competitive advantage: Gardening according to permaculture principles, with cooperation between people and nature being key</p>
<p>11 COST STRUCTURE</p> <p>Material and personnel costs (around 150.000 EUR / year)</p>	<p>07 REVENUE MODEL</p> <p>Economic viability and ecological sustainability go hand-in-hand, the objective being a garden that can sustain itself. Natural ecosystems function as an example.</p> <p>Almost entirely dependent on donations from private individuals and companies ("friends") who support with yearly or monthly donations</p> <p>Sponsorship of food circles by companies whose name tag will be placed in the circles</p> <p>No charge for fruit and vegetables (all harvest is donated)</p>			<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Municipality of Rotterdam (land owner)</p> <p>Environment (permaculture concept improves local biodiversity such as soil conditions, insects, birds, and small mammals)</p>



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GOOD PRACTICE: ROTTERDAMSE MUNT (ROTTERDAM MINT)

AT A GLANCE

- Social city garden stimulating green urban development
- Created in 2014 together with local residents, originating from an experimental residents' initiative on a vacant lot in the Parkstad development area
- Area of 8,000 m²

HIGHLIGHTS

- After beginnings as a herb garden, Rotterdamse Munt moved to its new permanent location on Rosestraat in 2018
- Intensified successful collaboration with Food Garden Rotterdam and Pluspunt Rotterdam in 2022
- Rotterdamse Munt functions as an outdoor classroom for over 700 children from the neighbourhood

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The added value of being a volunteer at Rotterdamse Munt is that it gives me a lot of peace and social contacts. And that I fill my days with something useful.

- Mato Sendula, Volunteer, Rotterdamse Munt



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GOOD-PRACTICE ECS: ROTTERDAMSE MUNT (ROTTERDAM MINT)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Rotterdamse Munt is a social city garden run as a non-profit foundation that was established in 2014 in Oslo's Feijenoord district. Next to a garden shop and a mint terrace, it boasts four city gardens with different landscape designs: the pioneer garden, herb garden, shrub garden, and forest garden. Another garden, in particular a food forest with edible plants, trees and shrubs, as well as a garden and kitchen market are planned for the year 2024.</p>		<p>02 VISION & MISSION</p> <p>The vision of Rotterdamse Munt is a society in which people actively shape their lives and participate in society, education, and the labour market to the best of their ability. Its mission is to develop city green through various projects and programmes aimed at allowing citizens to meet, engage in gardening, and support each other in working towards a green and healthy city.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Collaboration with foundations such as Pluspunt Rotterdam Foundation and Food Garden Rotterdam (see p. 24) to engage residents in gardening</p> <p>Partnerships with companies to realise joint projects and products, e.g., social business Pineut who use Rotterdamse Munt's mint in their products</p> <p>Collaboration with the initiative Plantenverhalten in creation of an audio tour featuring stories of the various gardens and their edible plants</p> <p>Collaboration with initiative Groei & Bloei to offer walking excursions on a range of topics such as soil health and permaculture</p> <p>Partnerships with new green initiatives in the neighbourhood to support a green local network</p>	<p>08 KEY ACTIVITIES</p> <p>Organisation of natural and ecological gardening activities</p> <p>Maintenance of the garden, also through volunteer work</p> <p>Food processing such as of herbs</p> <p>Sale of products in the garden shop</p> <p>Café: preparation of meals & drinks, e.g., lemonade, tea</p> <p>Design and delivery of nature and environmental education that includes gamification elements, e.g., lessons in sowing, tending, and harvesting, and preparation of food such as soups and herb butter</p> <p>Organisation of public events, e.g., movie nights, annual winter festival, wild picking walks through the garden</p>	<p>03 VALUE PROPOSITION</p> <p>For urban citizens interested in local production of food and gardening, the city garden allows to engage in urban gardening and harvesting of locally produced plants and herbs, thereby helping people reduce their climate footprint and gain new knowledge. The social garden functions as a public space that fosters not only urban biodiversity, but also creates social cohesion in the neighbourhood and integrates vulnerable citizens into the social fabric. Companies involved in creation of food products and services benefit from using locally grown fresh ingredients, providing their offer with an attractive advantage.</p>	<p>04 CUSTOMERS</p> <p>Companies and organisations who use the garden harvest in their products and offers, e.g., restaurants, cocktail bars, cookie shops, soup shops, tea shops</p> <p>Beneficiaries:</p> <p>Environmentally conscious people interested in learning more about urban agriculture</p> <p>Citizens distant from the labour market</p> <p>Primary and secondary school children</p>	<p>05 COMPETITORS</p> <p>Other urban gardens in Oslo with a focus on social sustainability</p>
<p>11 COST STRUCTURE</p> <p>Maintenance of the garden</p> <p>Garden equipment</p> <p>Gastronomic supplies</p> <p>Salaries for staff</p> <p>Modest allowances for volunteer gardening coordinators and teaching assistants</p>	<p>07 REVENUE MODEL</p> <p>Participant fee for open gardening (3,50 € half-day allowance)</p> <p>Discovery gift cards and stamp cards for flower and herb cutting and picking</p> <p>Rental services</p> <p>Harvest subscription for restaurant chefs</p> <p>Sale of homegrown tea mixes</p> <p>Sale of food and drinks in the mint terrace (café)</p> <p>Funds such as the Cultural Participation Fund, NME Fund and Oranje Fund</p> <p>Donations</p>			
<p>09 KEY RESOURCES</p> <p>Volunteers in gardening, gardening coordination and teaching</p> <p>Gardening equipment</p> <p>Rainwater system</p> <p>Gastronomic equipment</p> <p>Water, electricity</p>		<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Financial supporters such as the Ministry of Education, Culture and Science, the Van Dijk Nijkamp Foundation, and Rabobank</p> <p>Local neighbourhood (Feijenoord, Oslo)</p>		

4 EDIBLE CITY OSLO

KEY DATA (2023)

Population	1,064,235
Area (km ²)	276
Population density (inhabitants/km ²)	3,855
Climate	Warm Summer Continental Climate
Average annual rainfall (mm)	830
Average low/high temperatures (°C)	7/11



OVERVIEW OF URBAN AGRICULTURE DEVELOPMENT IN OSLO

Oslo is one of the fastest growing capital cities in Europe. In the 1900s, allotment gardens in Oslo (Kolonihagene i Oslo) provided the urban population with not only food for personal consumption, but recreational spaces as people sought for a better quality of life in the city and a healthier environment for their children. In 1927, the Norwegian Allotment Garden Association (NKHF) was founded to secure existing allotment gardens and contribute to creating new plots of rented land. Studies from the turn of the century show that people took up allotment gardening mostly for non-material reasons such as social interaction, physical and mental well-being, as well as the pleasure of engaging in growing food. It also showed that at the time, allotment gardens had not been considered in area planning and land use in the city. Today, over 20 allotment garden areas are spread across Oslo, consisting of private allotments as well as community gardens. As access to allotment gardens remains limited, people have started to grow food in their gardens through housing associations and complexes.[12][13][14]

In general, the last decade has seen a rise in the interest in urban agriculture in Oslo and a wider trend of emerging local initiatives. A study conducted by the Norwegian Institute of Bioeconomy Research found that the citizens of Oslo are even willing to increase their tax payments to contribute to the further development of urban agriculture in Oslo. The city of Oslo has started to explore new ways of meeting the increasing demand of growing food in the city. Due to its location, its urban development is concentrated within the existing built environment and requires densification. Hence, integrating urban agriculture in already existing and planned spaces has been recognised as an effective strategy. Flanked by Sprouting Oslo (see below under Urban Food Policies and Strategies), Oslo's official strategy for urban agriculture published in 2019, the city has invested more efforts and resources into

making unused areas available for urban agricultural activities and increasing the share of urban trees that are fruit trees. In doing so, it focuses on supporting cultivation practices based on organic principles, avoiding the use of chemical pesticides and synthetic fertilisers. Given the problem of contaminated soil due to past human and industrial activities, Oslo works together with research institutes to check requirements for soil remediation to make more areas available for food production. As an alternative, healthy soil may be added or growing boxes may be used instead.

Oslo Skolehagene (Oslo School Gardens) also represent important urban green areas for food production. There are around 30 school gardens in Oslo, run by 40 schools. In total, they account for an area of around 93 000 m². The largest school garden area not only in Oslo, but the whole of Norway, is Geitmyra which represents a municipal competence centre for school gardens. Next to providing school children with a practical opportunity to learn about nature, food, and gardening in the growing season, it is also used for events such as the city farmer festival and school garden family days, as well as an area for play and physical activity in the winter. All schools that organise operations in a school garden on their own premises are eligible for funding by the city of Oslo of up to 2,000 NOK (around 170 EUR). Another interesting development in urban agriculture in Oslo has been the successive founding of several urban cooperative farms, which are run based on community-supported agriculture models, in short CSA (andelslandbruk).[15][16][17][18][19]

URBAN FOOD POLICIES AND STRATEGIES

Food Nation Norway

Food Nation Norway is a political framework for sustainable food production, business development and value creation based on nutritious and safe Norwegian food. The vision is to achieve sustainable production and use of food, sustainable agriculture, and food waste reduction, in accordance with international and national regulations. The food industry, organisations, and individuals are called to commit to ensuring high quality of food, animal and fish welfare, and plant health.

National Strategy for Urban Agriculture

In 2021, the government of Norway launched the National Strategy for Urban Agriculture which encourages the preparation of regional and local strategies for urban agriculture. It focuses on three areas of work: sustainable urban development, increased knowledge on sustainable food production, and increased sustainable value creation and business development. To stimulate the development of urban agriculture, it has foreseen the preparation of guidance material for urban agriculture in local land-use planning, for planting of fruit trees, berry bushes and other edible plants in green spaces such as parks, as well as guides for carrying out small-scale urban agriculture and setting up school gardens.

National Center for Urban Agriculture

Norway's National Center for Urban Agriculture is based at the Norwegian University of Life Sciences in Oslo, and promotes education and research on urban agriculture and circular economy.

Spirende Oslo (Sprouting Oslo)

Spirende Oslo is Oslo's urban agriculture strategy, developed by Oslo's Urban Environment Agency in 2019. With a time horizon until 2030, the strategy foresees urban agriculture to contribute to Oslo becoming a greener city and fostering biodiversity and self-sufficiency with edible plants, for instance through greening of unused areas and spaces. It sets forth to support a variety of innovative practices for local food production, from large scale food production on city farms such as community supported agriculture to animal husbandry and hydro- and aquaponics. It aims to enhance citizen participation, for example through improving infrastructure and providing access to water and materials. Urban agriculture is also considered an important opportunity for creating social meeting places for people from different social, age, and cultural backgrounds. The relevance of integrating urban agriculture in social service provision, e.g., therapeutic horticulture and job creation programmes, is also considered. Further, the strategy links urban agriculture with education, highlighting the relevance of providing more support for school gardens and respective after-school programmes in urban gardening. Objectives are also set for developing a stronger support system for local actors active in urban agriculture, such as businesses, social and green entrepreneurs, and volunteers as well as collaboration across municipal, state, private, and voluntary actors.



PROGRAMMES, NETWORKS AND COMMUNITIES SUPPORTING URBAN AGRICULTURE IN OSLO

Tilskudd til urbant landbruk (Urban agriculture grants)

The municipality of Oslo provides a dedicated [urban agriculture grant](#) scheme, usually for a time period of up to two years. Measures eligible for funding include those promoting themes such as entrepreneurship, social integration, user participation, environment, climate, organic production, and public health. The scheme is open for application from organisations, volunteers, sustainable entrepreneurs, businesses, public enterprises, housing associations, or private individuals with a residential address in Oslo.

Nordic Food Policy Lab

The [Nordic Food Policy Lab](#) is a platform that showcases and catalyses initiatives for sustainable food systems in the Nordic region and beyond. They offer grants, workshops, publications, and networking opportunities for food policy actors, including urban agriculture entrepreneurs.

Bykuben (City Cube)

[Bykuben](#) is Oslo's centre for urban ecology. It functions as a centre for knowledge and innovation on sustainable urban development, environment, and climate. As an open meeting place for people who are engaged in creating a sustainable city, it works to enable dialogue and collaboration, for instance through organising events and meetings and providing its space to actors in the field. Projects it works on include Green Life Oslo (a map of green places in Oslo, including urban agriculture initiatives), Oslo Trees (collaborative initiative for tree planting), and Temporary Streets and Urban Spaces (using street space in new ways to create more space for urban nature). The centre is run by Oslo municipality and bases its work on the UN Sustainable Development Goals, specifically goals 11 to 15 (11 - Sustainable Cities and Communities, 12 - Responsible Consumption and Production, 13 - Climate Action, 14 - Life below Water, 15 - Life on Land).

Adopt a Growbox

Residents living in Oslo's Sagene district can apply to [adopt a grow box](#) including soil free of charge for own maintenance and care. Priority is given to people who do not have access to an own garden or land. Once adopting a grow box, residents get to join the district's cultivation network which organises gatherings and exchange to share experiences and advice.

Oslo Innovation Week and Oslo Innovation Award

The yearly [Oslo Innovation Week](#) highlights green solutions that solve real global challenges through entrepreneurship and innovation. It is attended by around 15,000 people annually. In the frame of the Innovation Week's programme, [the Oslo Innovation Award](#) is awarded. Since 2008, the prize recognises and rewards innovative and sustainable solutions that contribute to Oslo's green transition. The award is organised by the City of Oslo and Innovation Norway to stimulate Oslo's development as a leading region of innovation. The winner receives 250,000 NOK (around 21,500 EUR).

EAT Cities

[EAT Cities](#) is a pillar of the international non-profit foundation EAT based in Oslo, which works to link food, health and sustainable development across science, policy and business. EAT Cities focuses specifically on driving change in urban food systems worldwide, working in partnership with cities such as Oslo to support policy and practice development. For instance, in 2022 EAT Cities carried out the project Oslo Youth for Healthy and Sustainable Diets, consulting local youth in Oslo to develop recommendations on how to redesign public spaces and school meals to consider sustainability and health aspects.



GOOD PRACTICE: LOSÆTER

AT A GLANCE

- Urban farm located along the waterfront in Oslo's Bjørvika district
- Established in 2011 as an art project, and since 2019, run by the municipality as a non-for profit organisation
- Coordinator: Stephanie Degenhardt

HIGHLIGHTS

- Successful cooperation of a group of cooperatives (Futurefarmers, Flatbread Society and the Future of Food collective) who have established the urban farm to raise questions about the future of food, responsible food production and use, and a return to community practices and embracing of indigenous plants
- On June 13, 2015, a procession of farmers from over fifty Norwegian farms carried soil from their farms through the city of Oslo to its new home at Losæter urban farm. The soil procession was aimed at marking symbolically the transition of an urban piece of land into a space for action related to food production and art

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GOOD-PRACTICE ECS: LOSÆTER URBAN FARM

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Losæter is an urban farm located in a former urban wasteland in Bjørvika, in the east of Oslo's city centre. The foundations for the farm were laid in 2011 by artist collective Futurefarmers on behalf of Bjørvika Utvikling, who manage the district's public space construction. Official founding took place in 2015, accompanied symbolically by more than 50 farmers from all over Norway. The same year, Oslo City Council recognised Losæter as having the potential to become a competence centre for urban agriculture and cultural history in the city centre.</p>		<p>02 VISION & MISSION</p> <p>Losæter views itself as a cultural institution without walls that provides a commons for seeds, soil, and people. It contributes to the development of organic processes in agriculture and different forms of culture and social gathering. It stands for openness and flexibility, returning to the area's former use before the industrialisation as an agricultural area, and setting itself apart from the rest of the Bjørvika area which is characterised by modern high-rise builds and a "rational development logic".</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Futurefarmers Flatbread Society who have helped to operate the public bakery and cultivated grain field at Losæter</p> <p>Cooperation with the nature upper secondary school Natur videregående skole whose students help out on the farm as future urban farmers</p> <p>Research organisations</p> <p>Project partnerships with local governments, educational organisations Private or public property owners</p>	<p>08 KEY ACTIVITIES</p> <p>Production and preparation of food</p> <p>Dissemination of knowledge about food production for children and young people</p> <p>Organisation of events, such as the annual Losæter Festival, seminars, weekly joint dinners, official tours, and provision of a stage for art and action related to food production</p>	<p>03 VALUE PROPOSITION</p> <p>Losæter create a unique cultural institution for those who would like to engage in food production in the city. Its programme and activities focus on both environmental and social sustainability, contributing to the regeneration of urban soil and education for Oslo citizens about ecological systems and sustainable agriculture practices.</p>	<p>04 CUSTOMERS</p> <p>Oslo citizens who appreciate locally and sustainably produced food</p> <p>School children and young people</p>	<p>05 COMPETITORS</p> <p>Other urban agriculture initiatives in Oslo</p>
<p>09 KEY RESOURCES</p> <p>Land (former wasteland) Urban farming tools and equipment (Norway's first) urban farmer Volunteers Bee hives Greenhouse</p>			<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Funders: local government (municipality and district)</p>	
<p>11 COST STRUCTURE</p> <p>Gardening tools and machines Shared rental Fixed costs</p>		<p>07 REVENUE MODEL</p> <p>Public grants from the government Volunteer hours</p>		



GOOD PRACTICE: GEITMYRA CULINARY CENTRE

AT A GLANCE

- Food culture centre for children in five locations across Norway (Oslo, Kristiansand, Ringsaker, and Tønsberg)
- Established in 2011
- Founder: Andreas Viestad

HIGHLIGHTS

- In total, Geitmyra reaches 70,000 children annually, both physically and digitally
- Each year, more than 4,000 school children take part in Geitmyra's educational programmes in Oslo. The farm is visited by around 8,000 people at other events

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At Geitmyra, we challenge the senses and curiosity - here, children will learn to trust themselves. Cooking is not just about transforming products you have bought. It's about being part of how food comes to be. How can we use food as a way to discover the world?

- Andreas Viestad, Founder, Geitmyra Culinary Centre



© Pia Sundnes / Geitmyra

GOOD-PRACTICE ECS: GEITMYRA CULINARY CENTRE

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Geitmyra is a non-profit foundation that was founded in 2011 in Oslo, Norway. Located in the heart of Oslo, Geitmyra runs an educational farm, including three kitchens, a garden, and an edible yard in a nearby school.</p>		<p>02 VISION & MISSION</p> <p>The vision of Geitmyra is to educate as many children and teenagers as possible about food with a positive impact for people and the environment. The mission is to provide a hands-on and fun environment which fosters learning and appreciation for healthy food and the processes of producing and preparing food.</p>							
<p>10 KEY PARTNERSHIPS</p> <p>Nearby school which provides a large plot of land for urban farming</p> <p>Food industry representatives who act as partner in Geitmyra’s educational programmes</p> <p>After-school clubs and sports clubs who offer employment opportunities in cooking and gardening for youth who have completed Geitmyra’s training courses</p> <p>NGOs such as Save the Children Norway and Red Cross Norway</p> <p>Edible Schoolyard Project, a non-profit organisation based in Berkeley, California, dedicated to the transformation of public education by using organic school gardens and kitchens</p>	<p>08 KEY ACTIVITIES</p> <p>Educational design and delivery of classes and courses focused on urban farming, farm life, cooking, and sustainability as well as holiday programmes, e.g. cooking classes for youth</p> <p>Development of recipes and teaching plans based on the recommendations from the Norwegian Directorate for Health</p> <p>Development of training programmes for youth to enable employment in the food sector, e.g., as junior cooks and junior gardeners</p> <p>Design and organisation of events such as family food festivals and open family days</p> <p>Development of train-the-trainer material and resources</p>	<p>03 VALUE PROPOSITION</p> <p>By developing and offering courses and hands-on programmes for children and teens which connect topics of food and health with natural sciences, history, geography, language, and mathematics production, Geitmyra fosters appreciation for healthy food and nature in the young generation. Geitmyra furthers its positive impact by offering education in food and health to adults who act as knowledge multipliers.</p>	<p>04 CUSTOMERS</p> <p>Children (kindergarten and primary school children)</p> <p>Youth (secondary school)</p> <p>Kindergardens</p> <p>Schools</p> <p>(Future) parents interested in the topics of parenting and food</p> <p>Educators interested in teaching the importance of food and sustainability to children</p>	<p>05 COMPETITORS</p> <p>Other educational programmes on urban farming for children and youth</p>					
	<p>09 KEY RESOURCES</p> <table border="0"> <tr> <td>Plot of land supplied by Oslo municipality (part of Norway’s largest school garden located in the middle of the city)</td> <td>Further infrastructure to enhance urban farming and cooking experience, e.g., insect hotel, baking oven, and smoker</td> </tr> <tr> <td>House with kitchens as well as a garden, originally a farmyard from the mid-18th century</td> <td>30 employees with expert knowledge in ecological farming</td> </tr> <tr> <td>Greenhouse and growing boxes</td> <td>24 junior chefs</td> </tr> <tr> <td>Livestock (chickens)</td> <td>6 junior gardeners</td> </tr> </table>			Plot of land supplied by Oslo municipality (part of Norway’s largest school garden located in the middle of the city)	Further infrastructure to enhance urban farming and cooking experience, e.g., insect hotel, baking oven, and smoker	House with kitchens as well as a garden, originally a farmyard from the mid-18th century	30 employees with expert knowledge in ecological farming	Greenhouse and growing boxes	24 junior chefs
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House with kitchens as well as a garden, originally a farmyard from the mid-18th century	30 employees with expert knowledge in ecological farming								
Greenhouse and growing boxes	24 junior chefs								
Livestock (chickens)	6 junior gardeners								
<p>11 COST STRUCTURE</p> <p>Production and operational cost</p> <p>Internal salaries</p> <p>Administration</p>		<p>07 REVENUE MODEL</p> <p>Public grants provided by the government</p> <p>Private grants provided by businesses and organisations</p>							



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GOOD PRACTICE: TVETEN ANDELSGÅRD SA (TVETEN COMMUNITY FARM)

AT A GLANCE

- Community supported agriculture (CSA) project in Oslo
- In operation since May 2019 on land leased out free of charge by the Municipality of Oslo
- Area: 5019 m²

HIGHLIGHTS

- Nominated for Oslo's Environmental Award in the category "Green company of the year" in 2022 and highly commended initiative in the Edible Cities Network Awards "Most Innovative Individual Action" category in 2023

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People create magic. Gather the right people, get them to work well together and contribute with their particular skills and interests and you can do just about anything. Tveten has become the wonderful place it is because of the people who have contributed in different ways and the community we have built together.

- Idun Tjemsland, Gardener, Tveten andelsgård



© Idun Tjemsland

GOOD-PRACTICE ECS: TVETEN ANDELSGÅRD SA (TVETEN COMMUNITY FARM)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Tveten andelsgård is a cooperative farm that was established in 2019 in the Tveita district in Oslo. The piece of land, formerly an unused and overgrown field, is owned by the municipality of Oslo which allows the cooperative farm to use the land free of charge. The farm has one employee, the gardener, and a board who functions as the farm administration. Currently, Tveten cooperative farm consists of 194 members, divided in 44 single shares and 46 family shares.</p>		<p>02 VISION & MISSION</p> <p>The vision of Tveten Andelsgård is to contribute to sustainable food systems in cities. With its cooperative farm concept, it aims to foster communities that create sustainable change together through engaging in environmentally-friendly production of high-quality vegetables.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Collaboration with municipality of Oslo in developing educational programmes and tools around school garden teaching and learning in a cooperative farming context, e.g.: Skolehage på andelsgård</p> <p>Tveita school</p> <p>Since May 2020, certified as an organic food producer according to Debio who regulate and manage organic production in Norway</p> <p>Part of the informal network "Community Supported Agriculture (CSA) in Norway" which is part of Organic Norway and funded by the Norwegian Agricultural Agency (Landsbruksdirektoratet)</p>	<p>08 KEY ACTIVITIES</p> <p>Organisation of activities to engage members and the Tveten community such as weekly organized "dugnad", an old Norwegian word translating to "good work", and used in Norwegian society to describe orchestrated voluntary community work. 1-2 times a week the gardener makes a plan to structure the work that needs to be done by available participants. The "dugnad" is the primary meeting place for members, and there is a focus on a good social environment both while working and resting.</p> <p>Organisation of events such as open info and family days, and a variety of farm- and food-related courses</p> <p>Participation in events such as the Tveten farm festival, family days, Økouka Oslo, and Oppsal Gatefest</p>	<p>03 VALUE PROPOSITION</p> <p>For urban consumers who value healthy and local food, Tveten Andelsgård provides organic and short-travelled produce which is farmed and harvested by the consumers as cooperative members who receive insights into urban farming practices and experience in growing and harvesting their own food. In addition, Tveten cooperative farm functions as a community and school garden where school children learn about food production in their own environment, conveying important knowledge about ecology and nature and fostering appreciation for healthy food.</p>	<p>04 CUSTOMERS</p> <p>Conscious consumers interested in engaging in urban cooperative farming as co-owners</p> <p>Schools in the neighbourhood, e.g. Tveita school (beneficiaries: school children who get to spend time on the farm, work together with the gardener, and taste fresh greens)</p>	<p>05 COMPETITORS</p> <p>Other cooperative agriculture farms in and around Oslo</p>
<p>11 COST STRUCTURE</p> <p>Production and operational cost</p> <p>Gardener salary</p> <p>Communication and administration expenses</p>	<p>09 KEY RESOURCES</p> <p>Professional gardener who organises the cooperative members' voluntary efforts</p> <p>Cooperative members (shareholders) who are active in supporting growing and harvesting activities</p> <p>Production tools and equipment</p> <p>Land area that was formerly an unused and overgrown field</p>		<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Municipality of Oslo who provide the land free of charge</p>	<p>07 REVENUE MODEL</p> <p>Individual and family shares (around 250-350 EUR) for one year at a time</p> <p>Membership fees (one-time registration fees)</p> <p>Sale of products such as bags with Tveten logo</p>



GOOD PRACTICE: AKER BRYGGE URBAN FARM

AT A GLANCE

- Aker Brygge Urban Farm (ABUF) is a microgreens project based at the Aker Brygge commercial centre in downtown Oslo
- Established in 2019, ABUF is currently owned by Anne-Kristine Tischendorf who manages its B2B production and shop

HIGHLIGHTS

- Promoting and making locally-produced microgreens accessible to all local businesses since 2019, and in 2023, opening an urban farm shop for regular customers
- Started the development of Aker Brygge into a hub for urban farming
- Supported the development of small-scale microgreens farming across Oslo
- Carrying out a research project on fostering sustainability mindset and awareness through growing microgreens, in collaboration with Handelshøyskolen BI (BI Norwegian Business School) and involving 240 students
- Holding events and workshops that allow sustainability, food and nutrition entrepreneurs to promote their services and share their knowledge

CONTACT

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 Shop: Grundingen 1, 0250 Oslo, Norway
<https://www.akerbrygge.no/nyhet/urbanfarm>
 akerbryggeurbanfarm@gmail.com



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Nutrition brings life to fruition – it is the key to growth and wellbeing.

- Anne-Kristine Tischendorf



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GOOD-PRACTICE ECS: AKER BRYGGE URBAN FARM

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Aker Brygge Urban Farm (ABUF) is a microgreens start-up established by urban food entrepreneur Mathias Olimstad Hauge in 2019. It is situated at Aker Brygge, a shopping and dining area at the Oslo harbour with more than 70 restaurants, bars, and shops, and more than 7,000 people who live and work there. The current owner is Anne-Kristine Tischendorf, who manages the B2B production as well as a shop.</p>		<p>02 VISION & MISSION</p> <p>The vision of Aker Brygge Urban Farm is to make locally-produced microgreens accessible to all local businesses and consumers and to help develop Aker Brygge as a hub for urban farming. ABUF also aims to support the development of small-scale farming of microgreens across the City of Oslo. Its mission is to cultivate microgreens and make them available to businesses and consumers. In addition, ABUF runs a shop that provides microgreens and local sustainable produce to consumers, and enables them to cultivate microgreens at home.</p>								
<p>10 KEY PARTNERSHIPS</p> <p>Collaboration with Vitenparken Campus Ås (science museum) in organising workshops on cultivation of microgreens</p> <p>Collaboration with universities and colleges such as Handelshøyskolen BI (BI Norwegian Business School) on a research project with 240 participants to explore growing of microgreens</p> <p>Member of Norges Vel (Royal Norwegian Society for Development), support the sustainable food sector in Norway</p> <p>Partner of app Too Good To Go, offering microgreens, salads, and herbs at a reduced price to avoid food waste</p>	<p>08 KEY ACTIVITIES</p> <p>Production, sale and delivery of microgreens (e.g., radish, broccoli, peas, coriander, fennel, cress, mustards) in recyclable growth trays</p> <p>Sale of microgreens and growing equipment</p> <p>Development of product range related to edible plants and sustainable lifestyles</p>	<p>03 VALUE PROPOSITION</p> <p>For mindful urban consumers who appreciate local food production, AB urban farm offers fresh microgreens that are nutritious and tasty, providing up to 40 times more nutrients than their fully grown counterparts. AB urban farm also passes on knowledge on microgreens and offers growing equipment to empower people to easily grow their own microgreens at home, where only access to water, light, and little space is needed. For restaurants who want to enhance their dining experience, AB urban farm offers short-travelled fresh microgreens which not only add special flavours, but also are decorative in appearance.</p>	<p>04 CUSTOMERS</p> <p>Local restaurants on the waterfront at Aker Brygge, e.g., ASIA, Jarmann Gastropub, LATTER and Lofoten fish restaurant</p> <p>Consumers interested in local cultivation of “living food” (via the shop and the AMOI Norway online shopping platform)</p>	<p>05 COMPETITORS</p> <p>Other microgreen producers in Oslo and beyond</p>						
<p>09 KEY RESOURCES</p> <table border="0"> <tr> <td>Small team of three employees with different backgrounds, passionate about sustainable food production</td> <td>Water</td> </tr> <tr> <td>Space (urban garden on the 4th floor of shopping mall at Aker Brygge)</td> <td>Seeds</td> </tr> <tr> <td></td> <td>Growing equipment and technology such as grow lights, containers, trays, and coconut fibre mats</td> </tr> </table>		Small team of three employees with different backgrounds, passionate about sustainable food production	Water	Space (urban garden on the 4th floor of shopping mall at Aker Brygge)	Seeds		Growing equipment and technology such as grow lights, containers, trays, and coconut fibre mats	<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Norwegian Property, who manage a large part of the Aker Brygge business centre, providing ABUF with production and shop space. In turn, ABUF functions as an essential element in Aker Brygge’s sustainability concept.</p>		
Small team of three employees with different backgrounds, passionate about sustainable food production	Water									
Space (urban garden on the 4th floor of shopping mall at Aker Brygge)	Seeds									
	Growing equipment and technology such as grow lights, containers, trays, and coconut fibre mats									
<p>11 COST STRUCTURE</p> <p>Production and operational costs</p> <p>Salaries for employees</p> <p>Communication and marketing expenses</p>		<p>07 REVENUE MODEL</p> <p>The main revenue stream is the B2B sale of microgreens.</p> <p>An additional revenue stream is the sale of microgreens, other produce, and cultivation equipment to consumers, as well as provision of educational services such as workshops.</p>								



GOOD PRACTICE: GREENHOUSE OSLO (ENTERSPACE)

AT A GLANCE

- Co-working and event space project with a rooftop farm and microgreen production site located in Landbrukskvarartalet, the upcoming agricultural district in Grønland in Oslo's city centre
- Run by Enterspace, a property leaser
- Area of rooftop farm: 200 m²

HIGHLIGHTS

- From 2017-2020, Greenhouse Oslo's rooftop was home to the Tak for Maten urban farm run by Nabolagshager in collaboration with the Urban Environment Agency. It functioned as a demonstration facility for roof-based agriculture, with the aim to develop knowledge to facilitate the establishment of more green roofs in Norway

CONTACT

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GOOD-PRACTICE ECS: GREENHOUSE OSLO (ENTERSPACE)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Greenhouse Oslo is a project run by property leaser Enterspace. It provides co-working, kitchen, and event space for sustainable companies, accommodating a rooftop farm as well as microgreen production space in its basement.</p>		<p>02 VISION & MISSION</p> <p>The vision of Greenhouse Oslo is to provide space for sustainable companies, including food companies. Its mission is to facilitate its members' activities in creating innovative and sustainable solutions to urban challenges.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Landlord Tåsen Microgreens who operate microgreen production site in the basement Rooftop farm operators Research projects Social organisations</p>	<p>08 KEY ACTIVITIES</p> <p>Space management such as of the rooftop and the basement Hosting of events such as festivals, presentations, and concerts Community building Organisation of guided tours, including the rooftop farm, microgreen farming in the basement, and members Organisation of cooking classes Hosting of bar and café Rampen (cider, wine, and snacks)</p>	<p>03 VALUE PROPOSITION</p> <p>For young but also established companies, Greenhouse Oslo provides spaces such office space, a 200 m2 rooftop garden as well as a basement, empowering entrepreneurs to develop and innovate their sustainable business in a suitable and inspirational environment and with a network of like-minded people and professionals.</p>	<p>04 CUSTOMERS</p> <p>More than 60 companies from the fields of food, design, urban development, culture, and tech</p>	<p>05 COMPETITORS</p> <p>Other companies leasing space for urban agriculture</p>
	<p>09 KEY RESOURCES</p> <p>Building premises, including basement and rooftop for urban food production Employees Information & Communication Technologies</p>			<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Office space provider IGG Malzfabrik MbH who provide the area for the ECF Farm in Berlin Public authorities, e.g. to receive permits</p>
<p>11 COST STRUCTURE</p> <p>Operational expenses (salaries for employees, marketing, utilities, legal, and administration costs)</p>		<p>07 REVENUE MODEL</p> <p>Main revenue stream is space rental (three rates: superflex – around 80 EUR, flex – around 130 EUR, office – around 485 EUR) Additional revenue streams are event space rental, including rental of the rooftop farm for events</p>		

5 EDIBLE CITY ANDERNACH

KEY DATA (2023)

Population	31,216
Area (km ²)	53.34
Population density (inhabitants/km ²)	568
Climate	Marine West Coast Climate
Average annual rainfall (mm)	830
Average low/high temperatures (°C)	6/15

OVERVIEW OF URBAN AGRICULTURE DEVELOPMENT IN ANDERNACH

In 2007, the town of Andernach in the district of Mayen-Koblenz in Rhineland-Palatinate started using its public green spaces for urban agriculture, growing fruit and vegetables such as lettuce, tomatoes, potatoes, beans and cabbage. Launched in a top-down learn-by-doing process by a team made up of the city administration, local politicians, and businesses, a city-wide campaign was rolled out to turn Andernach into a multifunctional edible city. A major green space cultivated are the Edible Gardens in the city centre, located along the old castle ruins and city wall. By now, the city boasts 8,000 m² of urban gardens in the city centre and 130,000 m² of municipal land in the suburbs. The Edible City of Andernach has won several awards and represents a pioneering project in the urban agriculture movement. Several cities in Germany such as Kassel, Halle, and Berlin have followed suit, taking inspiration from Andernach's sustainable urban development. Under the motto "picking allowed", Andernach's citizens are encouraged to help plant and maintain urban food which is open for harvesting. In this way, residents are sensitised for topics such as urban gardening, biodiversity, healthy food, and seasonality and are actively involved in creating new social and environmental value in their city's public spaces such as improving the city's climate through more green surfaces. The aim has been to increasingly involve Andernach citizens such as students, seniors, and community groups in maintenance of the gardens, for instance through sponsorships of individual beds. For the city, a favourable side-effect is lower costs for maintenance as well as a more sustainable form of maintenance of city green.[20][21]

In 2018, the city of Andernach joined the Edible Cities Network (EdiCitNet) project. A living lab including a multitude of participants was established, focusing efforts on supplementing the city's top-down approach with bottom-up initiatives and involving schools and kindergartens.[22] A survey carried out in 2019 with more than 380 citizens showed that more than half of those surveyed were familiar with the edible city concept in Andernach, and 30% of those surveyed stated that they actively harvest fruit or vegetables in the city.[23]



URBAN FOOD POLICIES AND STRATEGIES

The municipality of Andernach has implemented the concept of the edible city without an official strategy in place, but rather through experimentation and practical learning.[24] Implementation of the edible city concept builds an element of the city's sustainable green space planning. Moreover, the campaign is also embedded as a municipal measure for climate change mitigation.

PROGRAMMES, NETWORKS AND COMMUNITIES SUPPORTING URBAN AGRICULTURE IN ANDERNACH AND THE WIDER REGION

Stadtverwaltung Andernach (City Administration Andernach)

Over the years, various departments of Andernach city administration have been involved in implementing the Edible City concept. Currently, the Edible City project is managed by the Environment and Sustainability and Climate Protection departments. They can be contacted for further information, materials, and suggestions.

Edible City Tours

Andernach's tourism department offers guided tours through the Edible City, introducing visitors to Andernach's approach of using public green space for food production. Tours are carried out in the months April to October and can be booked by individuals as well as groups of up to 25 people. Upon request, interested visitors can book day tours, combining the Edible City tour with a tour of the permaculture project in Andernach Eich.

Edible Cities Network

Running from 2018–2023 as a EU-funded research project, the Edible Cities Network wants to contribute to more liveable cities around the world through implementing Edible City Solutions – solutions that engage in food production, distribution and consumption in cities. In 2018, the EU-funded EdiCitNet project started to supplement the edible city activities carried out by the Andernach city administration. EdiCitNet has developed a plethora of resources, tools and communities which can be consulted not only in Andernach, but worldwide.

Andernach schmeckt (Andernach Tastes Good)

Andernach schmeckt is a yearly culinary city festival that features a historic agricultural mile and a slow food market to celebrate the edible city of Andernach and introduce the concept to visitors. Focusing on sustainable and regional food, the festival invites people to try locally grown food and take part in activities related to the edible city. For instance, people can take part in edible city tours, join workshops on how to create planting substrate from green waste, and take home plants as part of the campaign Edible City to Take Home.

Mehr als nur Grün (More than just Green)

Mehr als nur Grün is a joint project of the city administration Koblenz and the district administration of Mayen-Koblenz which aims to provide support for designing public as well as private green spaces. The project was set up to counteract issues such as the decline in biodiversity and to contribute to a better local urban climate.





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GOOD PRACTICE: PERMAKULTURGARTEN EICH “LEBENSWELTEN“ (PERSPEKTIVE GMBH)

AT A GLANCE

- Permaculture garden project “Lebenswelten – Arbeitswelten” (area: 140,000 m²) initiated by social organisation Perspektive gGmbH working to create employment opportunities
- Perspektive gGmbH was founded in 1996 by the municipalities of Weißenthurm and Pellenz and the town of Andernach

HIGHLIGHTS

- Since launch of the project in 2008, its offer has been expanded continuously, e.g., to include a clay oven, orchard, arboretum, and seminar house, amongst others
- Successful project cooperation between Perspektive gGmbH, the city administration, and local politicians

CONTACT

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Societal erosion can only be counteracted by social justice. Developing an understanding of this creates socially just and desirable living spaces with equal opportunities.

- Christian Luxem, Authorised Representative, Perspektive gGmbH



© Christian Luxem

GOOD-PRACTICE ECS: PERMAKULTURGARTEN EICH “LEBENSWELTEN“ (PERSPEKTIVE GGMBH)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>Perspektive gGmbH is a non-profit organisation for vocational training and integration, supporting people without work or training in finding employment and training. One of its focus areas for providing new knowledge and skills is urban gardening and landscaping. In its project Lebenswelten – Arbeitswelten (living environments – working environments) people are trained in cultivation of food through farming at the Permaculture Garden Eich.</p>		<p>02 VISION & MISSION</p> <p>The vision is the creation of strong social infrastructure and well-functioning public spaces. The mission is to promote, improve and stabilise the social and professional prerequisites for integration into the regular labour market.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Expert guidance for participants provided by trained specialist instructors, including gardeners, and farmers</p> <p>Sustainable store Umdenken in Andernach through which fresh produce is sold to residents</p> <p>Cooperation with Slowfood Rhein-Mosel e.V. for installation of high beds</p>	<p>08 KEY ACTIVITIES</p> <p>Food production and distribution</p> <p>Provision of knowledge, skills, and training in gardening and landscaping, plant science, care measures for shrubs and trees, permaculture principles, and nature conservation</p> <p>Provision of recreational and educational area for citizens</p>	<p>03 VALUE PROPOSITION</p> <p>Lebenswelten - Arbeitswelten produce food for those who appreciate local, fresh produce and value the creation of green employment. The production of food focuses on social sustainability by providing training for people distant from the labour market and creating new jobs.</p>	<p>04 CUSTOMERS</p> <p>People whose reintegration into the labor market is at risk due to significant social and/or health-related disadvantages and a lack of professional qualifications. The group of people is predominantly made up of recipients of social benefits.</p> <p>Andernach citizens</p> <p>School children and kindergarten children</p>	<p>05 COMPETITORS</p> <p>Other job training programmes</p>
<p>09 KEY RESOURCES</p> <p>Gardening resources and equipment</p> <p>Rare breeds of farm animals</p> <p>14 hectares land area near the Eich district in Andernach</p> <p>Guidance provided by social workers</p>				<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Andernach city administration</p> <p>Mayen-Koblenz district job centre</p> <p>State of Rhineland-Palatinate</p>
<p>11 COST STRUCTURE</p> <p>Gardening tools and machines</p> <p>Salaries for employees</p>		<p>07 REVENUE MODEL</p> <p>Sale of produce (vegetables and fruit) via on-site farm store and partner stores</p> <p>Rental services of an event location (the glass house)</p>		



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GOOD PRACTICE: MALTAFLOR EUROPA GMBH

AT A GLANCE

- Company for the production of special fertilisers based on malt germs
- Founded in 1994
- Founder: Mario Protzmann

HIGHLIGHTS

- 1995: Rhineland-Palatinate State Environmental Award for the development of its fertilisers
- Supplying national customers and expanding the customer base in other European countries over the years
- Development and market launch of products with symbiotic microorganisms (mycorrhiza)

CONTACT

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Think about whether everything that is advertised as desirable today is perhaps just a fashion. Fashion should not be the basis of your actions, unless you run a fashion business.

- Dr. Mario Protzmann, Founder, MALTaflor Europa GmbH



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GOOD-PRACTICE ECS: MALTAFLOR EUROPA GMBH

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>MALTaflor is a private company based in Andernach that specializes in the production of fertilisers based on malt germs. They offer a range of products for different purposes and guarantee success even under difficult conditions.</p>		<p>02 VISION & MISSION</p> <p>MALTflor’s mission is to activate soil and generate growth while conserving natural resources in the process. They aim for healthy plant growth in all areas, for agriculture, private gardens, sports turf and urban greenery. In order to achieve best results, the company constantly improves the fertilisers and develops new products in line with the latest findings, without "artificial substances" and without animal ingredients.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Collaboration with another production company of fertilisers</p> <p>Collaboration with city administrations and municipalities who provide testing areas</p> <p>Collaboration with universities for research and product testing</p>	<p>08 KEY ACTIVITIES</p> <p>Fertiliser production</p> <p>Product sale through sales representatives and online shop</p> <p>Advancement of fertilisers and development of new products</p> <p>Distribution of products (shipment)</p> <p>Maintenance of online shop and expansion of product line</p> <p>09 KEY RESOURCES</p> <p>6 employees</p> <p>Malt germs</p> <p>Online shop</p> <p>Production facilities</p> <p>Vehicle fleet for sales representatives</p>	<p>03 VALUE PROPOSITION</p> <p>MALTaflor produces organic-based fertilisers and offers customers of different scales the possibility of sustainable food production and landscaping. The products not only nourish the plants, but also revitalise the soil and thus additionally stabilise plant growth.</p> <p>The development of special fertilisers makes it possible to grow plants of good quality and stability, even in an increasingly difficult environment with soil pollution, water stress and climatic challenges which ensures healthy, biologically revitalised habitats.</p>	<p>04 CUSTOMERS</p> <p>B2C: Cities, municipalities, local authorities, private companies for gardening and landscaping, agricultural businesses particularly with speciality crops (wine, vegetables, strawberries)</p> <p>B2B sales via online shop: environmentally conscious consumers, motivated to create impact at home</p>	<p>05 COMPETITORS</p> <p>Product developers / enterprises who offer organic-based fertilisers</p> <p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Andernach city administration committed to developing and supporting ecological urban food production and sustainable urban greenery</p> <p>Universities carrying out product testing</p>
<p>11 COST STRUCTURE</p> <p>Operating costs (rent, employee salaries, software, vehicle fleet, energy costs etc.), advertising and marketing costs, distribution and shipping costs, raw material procurement, costs for purchase and maintenance of production facilities, costs for research and product development</p>		<p>07 REVENUE MODEL</p> <p>B2C and B2B sale of fertilisers (sales representatives and online shop)</p>		



GOOD PRACTICE: GEMEINSCHAFTSGARTEN ANDERNACH (COMMUNITY GARDEN ANDERNACH)

AT A GLANCE

- Community garden established in 2018 by the Edible Cities Network project in cooperation with a multitude of local actors
- Area: 6000 m²

HIGHLIGHTS

- Successful installation of a wastewater reuse-system with Berlin-based engineering consultancy Nolde - innovative Wasserkonzepte GmbH to use wastewater as main water source for the garden

CONTACT

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<https://www.facebook.com/p/Gemeinschaftsgarten-Andernach-Edicitnet-100084930411398/>

edicitnet@andernach.de



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GOOD-PRACTICE ECS: GEMEINSCHAFTSGARTEN ANDERNACH (COMMUNITY GARDEN ANDERNACH)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>The Gemeinschaftsgarten Andernach is a community garden that was initiated by the EdiCitNet project in cooperation with Andernach city administration and Perspektive gGmbH. It functions as a living lab, involving public and private actors as well as users in a gardening space that enables experimentation and co-creation of innovations.</p>		<p>02 VISION & MISSION</p> <p>The vision of Gemeinschaftsgarten Andernach is to foster creative engagement with food and promote social cohesion in the city of Andernach. Its mission is to engage the citizens of Andernach in actively partaking in communal gardening activities through offering a dedicated experimental area in the city.</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Perspektive gGmbH who support with gardening activities</p> <p>Local youth centre to carry out joint activities, e.g., anti-fear trainings</p> <p>Local kindergartens and local schools such as the St. Thomas Realschule Plus who participated in gardening activities in the frame of the EU-funded project “Garden of cultures in Europe”</p> <p>Donation of harvest to food bank Caritas Mayen-Andernach</p> <p>Partnership with Slowfood Rhein-Mosel e.V. in experimenting with seed production of peas</p> <p>Cooperation with fertilizer manufacturer Maltoflor for conduction of soil quality analysis</p> <p>Cooperation with universities and research institutes, for instance to carry out research on global warming</p>	<p>08 KEY ACTIVITIES</p> <p>Food production and harvesting involving the local community</p> <p>Processing of food, e.g., apple juice brewing</p> <p>Design and delivery of environmental education for children and youth</p> <p>Design and delivery of workshops for teachers and educators</p> <p>Organisation of public events such as pumpkin and potato harvest activities</p>	<p>03 VALUE PROPOSITION</p> <p>The community garden Andernach provides access to healthy and fresh food and a space for social exchange for citizens of Andernach, including vulnerable groups, while benefitting the local environment through enhanced soil health and insect diversity.</p>	<p>04 CUSTOMERS</p> <p>Beneficiaries: Andernach citizens, including students and elderly people</p>	<p>05 COMPETITORS</p> <p>None</p>
<p>09 KEY RESOURCES</p> <p>Community gardener</p> <p>Year-long experience in edible city concepts</p> <p>Gardening equipment</p> <p>Seeds</p> <p>Water reuse system</p> <p>Weather station</p> <p>Beehives</p>				<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>EdiCitNet project</p> <p>City administration departments: environment and sustainability, city planning, technical building, social services</p> <p>Andernach city marketing and tourism department</p>
<p>11 COST STRUCTURE</p> <p>Maintenance costs which steadily decreased by involving more citizens, students, and elderly people</p>		<p>07 REVENUE MODEL</p> <p>Public funding (EU funding through EdiCitNet project as well as regional grants)</p> <p>Donations, e.g., of apple trees by NaturFreunde Büdelsdorf, and bee hotels by Pilgrimforum</p>		



GOOD PRACTICE: RETHINK GEMEINSCHAFTSGARTEN (RETHINK E.V.)

AT A GLANCE

- Community garden run by the association ReThink e.V. in Neuwied, a town located next to Andernach
- Established in October 2021 as one of the first projects of the association
- Founders: Meike Barth, Andreas Barth and Vanessa Breuer
- Area: 330 m²

HIGHLIGHTS

- Successful implementation of the project since more than two years, accompanied by general further development and consolidation of the projects carried out by ReThink e.V.
- Organic farming without chemical fertilizers and pesticides

CONTACT

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*Try new things. Work together. Fail and try again.
Keep learning. And most importantly: Have fun!*

-- Andreas Barth, Co-Founder, ReThink e.V.



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GOOD-PRACTICE ECS: RETHINK GEMEINSCHAFTSGARTEN (RETHINK E.V.)

<p>01 DESCRIPTION OF IDEA/CONCEPT/ORGANIZATION</p> <p>The ReThink community garden was established in 2021 as one of several projects carried out by the association ReThink e.V. in Neuwied, originating from permaculture workshops. ReThink e.V. is a young association committed to resource conservation and environmental protection. It develops projects to stimulate local community action and foster sustainable lifestyles, from zero waste cooking to reuse and repair to organic shopping.</p>		<p>02 VISION & MISSION</p> <p>ReThink e.V. is committed to creating spaces and working together for a more sustainable use of Earth's resources. It works to develop creative ideas and programmes for private households and the local community to stimulate local action for sustainability according to the principle "think global, act local".</p>		
<p>10 KEY PARTNERSHIPS</p> <p>Other neighbourhood initiatives</p> <p>Local kindergartens and local schools</p> <p>Supporters such as Sparkasse Neuwied, Anstiftung foundation and Deutsche Postcode Lotterie</p>	<p>08 KEY ACTIVITIES</p> <p>Food production and harvesting involving people from Neuwied</p> <p>Environmental education for children and youth</p> <p>Organisation of events such as workshops on how to avoid food waste, conserve food via methods such as fermentation, and production of food such as herb salt</p>	<p>03 VALUE PROPOSITION</p> <p>The ReThink community garden provides an opportunity for neighbours and other locals to engage in gardening activities and practice food self-sufficiency, while benefitting the local environment through enhanced soil health and insect diversity.</p>	<p>04 CUSTOMERS</p> <p>Beneficiaries: Neuwied citizens as well as association members</p>	<p>05 COMPETITORS</p> <p>Other community gardens in the region</p>
<p>09 KEY RESOURCES</p> <p>Staff as well as volunteers</p> <p>Knowledge in permaculture</p> <p>Gardening equipment and tools</p> <p>Seeds, rainwater</p>				<p>06 OTHER RELEVANT STAKEHOLDERS</p> <p>Organisations providing financial and practical support: Sparkasse Neuwied, Anstiftung foundation, Deutsche Postcode Lotterie</p>
<p>11 COST STRUCTURE</p> <p>Maintenance costs</p>		<p>07 REVENUE MODEL</p> <p>Public funding</p> <p>Membership fees</p> <p>Donations</p> <p>Crowdfunding (Startnext)</p>		

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