FOCUSE: Food production and provisioning through Circular Urban Systems in European Cities

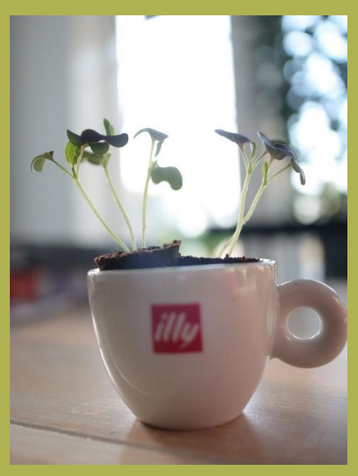
Michael Martin[1,2], Cameron Kennett[1,2], Vivek Voora[1], Todor Stojanovski[2], Rebecka Milestad [2], Anna Zareba [4], Veronica Arcas Pilz[3], Xavier Gabarrell Durany[3], Francesco Orsini[5] , Giuseppina Pennisi[5]

1- IVL Swedish Environmental Research Institute, 2- KTH Royal Institute of Technology, 3- Universitat Autonoma de Barcelona, 4-University of Wroclaw, 5-University of Bologna

Intro and Aims

Urban areas have:

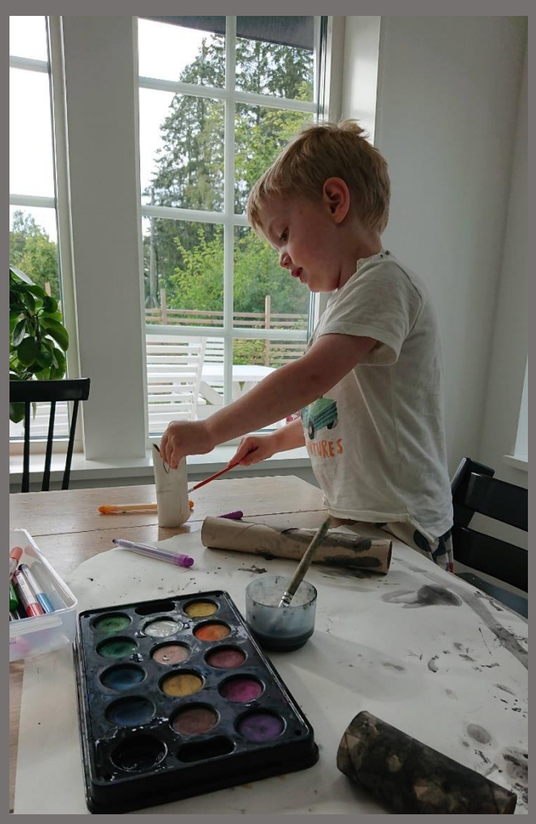
- Residual Space
- Residual Material
- Residual Energy
- Need for Resilient Food Systems



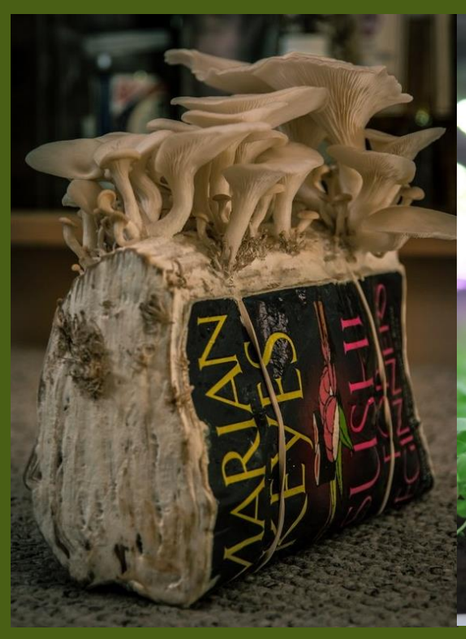
The overall aim is to explore, envision, develop, and analyze urban resource sharing for more circular-based food production in urban environments to enable sustainable and viable food provisioning and resource efficiency

Explore and Envision

- What is a future circular city?
- What different visions are there? (e.g. Children)
- What residuals are available?
- Where are these located?
- Can these be used for food production?
- How can these be used?
- How can existing and future developments incorporate agriculture?

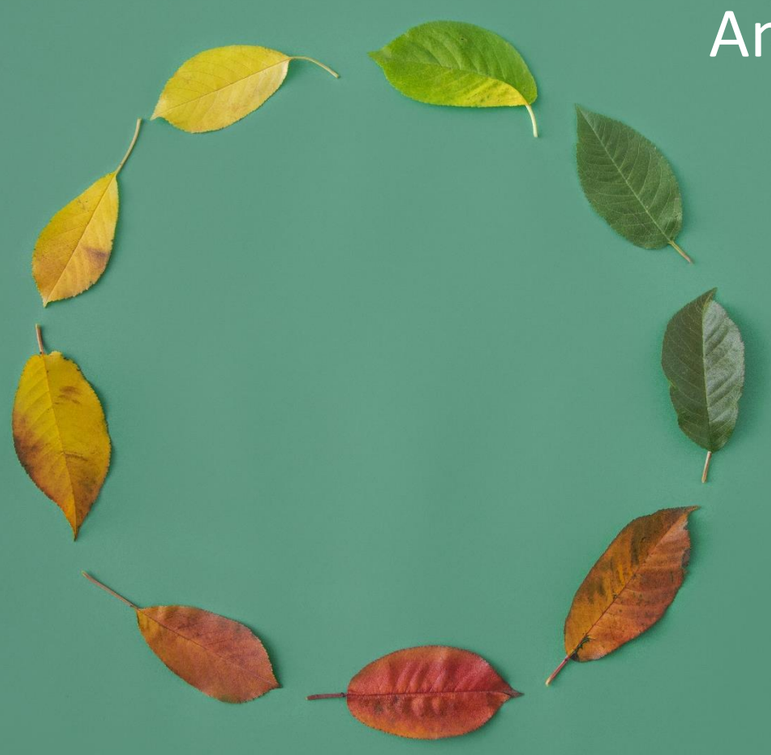


Develop and Experiment



- Residual material as growing media
- Residual streams for fertilizer production
- Urban wastes for mushroom production
- Building integrated agriculture
- Novel products and produce from urban areas
- Tests and experimental trials
- New business models to exploit circular urban resources

Analyze Sustainability and Viability



- Life Cycle Sustainability Analyses (LCA, LCC, Socio-Economic)
- Resource-Efficiency
- Urban Material Flow Analyses
- Societal Acceptance
- Economic Viability Studies
- Policy Analysis
- Business Model Development
- Outlining Symbiotic Benefits

Supported by: Driving Urban Transitions

Co-funded by the European Union