

Business models of collaborative urban upcycling initiatives

Understanding how strategic partnerships accelerate upcycling of discarded furniture and interior design products

Author(s)

van Hees, Marco; Oskam, Inge; Bocken, Nancy

DOI

[10.26481/mup.2302.22](https://doi.org/10.26481/mup.2302.22)

Publication date

2023

Document Version

Final published version

License

CC BY

[Link to publication](#)

Citation for published version (APA):

van Hees, M., Oskam, I., & Bocken, N. (2023). *Business models of collaborative urban upcycling initiatives: Understanding how strategic partnerships accelerate upcycling of discarded furniture and interior design products*. 1-5. Paper presented at 8th International Conference on New Business Models - Maastricht, Maastricht, Netherlands. <https://doi.org/10.26481/mup.2302.22>

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please contact the library: <https://www.amsterdamuas.com/library/contact/questions>, or send a letter to: University Library (Library of the University of Amsterdam and Amsterdam University of Applied Sciences), Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Download date: 29 Feb 2024

**Maastricht University Press • New Business Models Conference
Proceedings 2023**

Business models of collaborative urban upcycling initiatives

Marco van Hees¹ Inge Oskam¹ Nancy Bocken²

¹Amsterdam University of Applied Sciences, ²Maastricht University

Maastricht University Press

Published on: Jun 20, 2023

URL: <https://pubpub.maastrichtuniversitypress.nl/pub/7up8kiou>

License: [Creative Commons Attribution 4.0 International License \(CC-BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

Marco van Hees^{1,2}, Inge Oskam¹, Nancy Bocken²

¹Amsterdam University of Applied Sciences-Centre of Expertise City Net Zero; ²Maastricht University-Maastricht Sustainability Institute;

[*m.l.m.van.hees@hva.nl](mailto:m.l.m.van.hees@hva.nl)

Extended abstract

Introduction

Within European cities, entrepreneurs engage in private and public collaborative initiatives that work towards reducing local solid waste streams (Futurium, 2019). Furniture and interior design products account for nearly 50% of these waste streams, making them a key priority on the EU agenda to prevent climate change (Vanacore et al, 2021). New legislation to extend producer responsibility and reduce waste incineration is developing on a national level (PBL, 2021) and collaborative initiatives for urban upcycling are emerging (Ministerie I&W, 2023; Futurium, 2019). Business models to support upcycling are evolving, but their configuration and effectiveness is little understood.

Background

Upcycling entails the creative transformation and regeneration of waste material, components or discarded products to equal or higher quality or functionality (Sung et al., 2015; Lüdeke-Freund et al., 2018). Circular business models include “repair and maintenance” (RM), “reuse and redistribution” (RD), “refurbishment and remanufacturing” (RR), and “cascading and repurposing” (CR) and “recycling” models, provided that the resulting material is of higher quality (Lüdeke-Freund et al., 2018).

To identify how circular collaborative initiatives emerge, Prendeville et al. (2021) distinguished between institution-driven (top-down) and social driven (bottom-up) innovation. Bocken and Ritala (2021) proposed six circular business model innovation strategies (Table 1). Open-narrowing strategies (ON) focus on collaboratively developing new technologies and processes. Closed-narrowing collaborations (CN) do the same but internally. In open-slowning strategies (OS) product life times are collaboratively extended, while closed-slowning partnerships (CS) do this internally e.g., through long lasting design and repair. Open-closing strategies (OC) close the loop collaboratively, while closed-closing strategies (CC) do this internally e.g. through take-back plans. Circular innovation strategies (CIS) and circular economy business models (CEBMs) rely heavily on partnerships, and often entail networking across sectors.

Despite growing interest for upcycling collaborations little is known about the importance and motives of partners to engage in CEBMs for urban upcycling. Therefore, this study aims to identify, first, which partnerships occur in CEBM for upcycling of municipal solid waste streams and, second, how these partnerships contribute to the development of CEBMs for urban upcycling.

Method

This study uses a multiple case study method (Yin, 1994) with a sample of twelve cases (Table 1) which was created from a longlist of 150 randomly collected urban upcycling initiatives. The sample was based on maximum variety in relation to CEBM and innovation approach and on availability of data and/or willingness of upcycling entrepreneurs to participate in this study.

Table 1: Selection of upcycling collaborative initiatives based on business model aspects and innovation approach

Case	Description	CEBM type	Bottom-up vs. Top—down approach	CIS
A. ONZE-fabriek	Social guild	CR, RM	Bottom-up	OS
B. Buurman	Second hand DIY store	RR, RM		OS
C. The Substitute	Circular community platform	RR		OS
D. PlanQ	Repurpose projects	CR		OC
E. Tolhuijs	Repurpose projects	CR		OC
F. COOLOO	Furniture refurbishment	RR		OS
G. IKEA Circular Hub	Furniture thrift shop	RR		CC, CS
H. Leolux-Gelderland	Inhouse repair service	RM		CS
I. Bijenkorf- Reliving	On/offline furniture thrift platform	RR		OS
J. Fiction Factory	Production waste repurpose	CR		CN

K. Upcycle Centre Almere	Urban Resource Centre	CR	Top-down	CS
L. Arbeids trainings centrum TIB - Waardering	Social upcycling community	RR, RM		OC

Research data was collected by means of interviews of approximately 60 minutes with key stakeholders of the initiatives. For triangulation purposes additional data was collected from public sources.

Results

We identified four stakeholder types in collaborative initiatives for urban upcycling and their contribution to the upcycling business model by focusing on three main CEBM aspects: value proposition, value creation and delivery, and value capture (Table 2).



[Table 2 Stakeholder types and business model aspects of urban upcycling collaborative initiatives.pdf](#)

264
KB

Conclusions and discussion

This study aimed to address research gaps with regard to partnerships that occur in CEBM for upcycling of municipal solid waste streams and the contribution of these partnerships to the development of CEBMs for urban upcycling. First, we found various types of partnerships in urban upcycling: (1) partnerships with public stakeholders which involve all stakeholder types (2) a wide variety of bottom-up private partnerships, often involving collaborations between local entrepreneurs and larger corporations.

As for the business models, value propositions are largely based on providing services, such as creative-technical capabilities (COOLOO), knowledge (The Substitute, Buurman), creative design skills (Tolhuijs, PlanQ), community or platform access (Buurman, Reliving) or repair skills (Leolux-Gelderland). As for value creation, partnerships focus on availability of material, human and technological resources and innovation capabilities. Although value delivery aspects, such as media coverage and logistics, are frequently mentioned as critical, fewer strategic partnerships occur around these downstream communication and distribution activities. Finally, we found that a wide variety of financial revenue models occur in urban upcycling collaborations.

This study contributes to knowledge on building partnerships for circular economies by focusing on partnerships in CEBMs from the perspective of niche-initiatives. The conclusions of this study are intended to help entrepreneurs to engage partners for accelerating upcycling business models. Moreover, these findings may support policy makers in creating new incentives for stimulating urban upcycling practices.

Keywords

Upcycling partnerships, urban ecosystems, circular business models, public-private partnerships, solid waste management.

Acknowledgement

This study is part of the research project Urban Upcycling (RAAK.PRO04.029) that is co-financed through the Regieorgaan SIA (RAAK-PRO) subsidy scheme of the Taskforce for Applied Research of the Netherlands Organization for Scientific Research (NWO).

References

- Bocken, N., & Ritala, P. (2021). Six ways to build circular business models. *Journal of Business Strategy*.
- Futurium. (2019) Urban Resource Centres: a classification of local approaches to waste prevention, re-use, repair & recycling. Urban Agenda for the EU. Retrieved from:
https://ec.europa.eu/futurium/en/system/files/ged/classification_of_urban_resource_centres_0_0.pdf
- Lüdeke-Freund, F., Carroux, S., Joyce, A., Massa, L., & Breuer, H. (2018). The sustainable business model pattern taxonomy—45 patterns to support sustainability-oriented business model innovation. *Sustainable Production and Consumption*, 15, 145-162.
- Ministerie I&W (2022). *Nationaal Programma Circulaire Economie 2023-2030*. Retrieved from:
<https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/beleidsnotas/2023/02/03/nationaal-programma-circulaire-economie-2023-2030/Nationaal+Programma+Circulaire+Economie+2023-2030.pdf>
- PBL (2021/4511) *Extended Producer Responsibility: Design, functioning and effects*. Retrieved from:
<https://www.pbl.nl/sites/default/files/downloads/pbl-cpb-2021-extended-producer-responsibility-design-functioning-effects-4511.pdf>
- Prendeville, S., Cherim, E., & Bocken, N. (2018). Circular cities: Mapping six cities in transition. *Environmental innovation and societal transitions*, 26, 171-194.
- Sung, K., & Sung, K. (2015). A review on upcycling: Current body of literature, knowledge gaps and a way forward.
- Vanacore, E., Rex, E., Talalasova, E., Stewart, C., & Wickman, T. (2021). Circular Economy & the Furniture industry: The state-of-the-art in the EU & Sweden.
- Yin, R. K. (1994). Designing single-and multiple-case studies. *Improving educational management: Through research and consultancy*, 135-155.