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▶ To cite this version:

Walid Ijassi, Damien Evrard, Peggy Zwolinski. Making urban factories more sustainable through circularity design. Actionable Science for Urban Sustainability (un)Conference 2024, Mar 2024, Troyes (France), France. hal-04541197

HAL Id: hal-04541197 https://hal.science/hal-04541197

Submitted on 10 Apr 2024 $\,$

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Making urban factories more sustainable through circularity design

Walid Ijassi*, Damien Evrard, Peggy Zwolinski * walid.ijassi@grenoble-inp.fr

A 3 phases method to integrate local solutions in the development of sustainable urban factories

 Case study in Grenoble: reduce climate change (586 kg CO2 eq) and resources consumption (32,100 MJ) impacts related to the life cycle of an <u>arcade machine</u> over 5 years.



Conclusions

- The proposed method has allowed to design circular strategies and business models to act on specific sustainability objectives with regards to the geographic context and the value chain's model;
- The iterative nature of the method has pushed for the design of an additional solution;
- Local stakeholders' engagement has been leveraged to improve the designs' economic feasibility.