



SmartFood: Engaging citizens in food diversity in cities

D1.3. Co-design of energy management solutions

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Executive Summary

The SmartFood project aims to provide a novel evidence-based socio-technological framework of sustainable food production and consumption towards the sustainable smart city of the future by engaging micro-local communities through novel in-house food self-production and households' behavioural change of diet. To facilitate this process, an innovative hydroponic food self-reproduction system will be developed and installed in corridors of a selected building in Łódź (Central Poland) to provide sustainable food for citizens within the planned Urban Living Lab. This report describes the inception phase of this process. To create the necessary understanding of socio-technical needs and opinions among potential users of the system, a participatory co-design method was used.

Chapter 1 provides an introduction to the project and context of the report.

Chapter 2 analyses energy system of the SmartFood intervention. First, energy demand of the SmartFood Cabins is investigated, and suggestions on how to optimize it are provided. Secondly, energy needs of the building, not related to the SmartFood intervention, are presented. Finally, energy supply options are demonstrated, based on the Polish energy market analysis.

Chapter 3 presents results of the co-design workshop with end-users, who provided their opinions and feedback on the proposed SmartFood PV system.

Chapter 4 concludes the report. As a result, recommendations on refining of SmartFood PV solution based on feedback of end-users are provided.