




Stakeholder Engagement Plan Mikkeleli CDW

Deliverable 2.1

Mikkeleli Xamk and Miksei



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Abstract	This is a stakeholder engagement plan for the City of Mikkeli, supporting the implementation of the CityLoops activities in the construction and demolition waste (CDW) stream. The goal of stakeholder engagement is to develop a process, which inspires individuals, groups, businesses, institutions and others to improve their interaction and to cooperate effectively to accomplish goals. This plan represents an initial idea of how stakeholder engagement may work with the tools and demonstration actions in our city, but it is important to highlight that stakeholder

	engagement processes are reflexive and repetitive, and that the plan will be updated.
Keywords	Stakeholder engagement, Construction and Demolition Waste
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1. Executive Summary

This is a stakeholder engagement plan for the City of Mikkeli, supporting the implementation of the CityLoops activities in the construction and demolition waste (CDW) stream. The goal of stakeholder engagement is to develop a process which inspires individuals, groups, businesses, institutions and others to improve their interaction and to cooperate effectively to accomplish goals. The stakeholder plan is our tool to organize stakeholder processes in the implementation of our main and sub-activities of the CityLoops project. The stakeholder plan and the stakeholder analysis we provide in this document will act as an informative platform to carry out stakeholder activities and achieve our goals. This plan represents an initial idea of how stakeholder engagement may work with the tools and demonstration actions in our city, but it is important to highlight that stakeholder engagement processes are reflexive and repetitive, and that the plan will be updated.

2. Introduction to CDW demonstration actions

In the CityLoops project, Mikkeli is aiming to develop an innovative pre-demolition inspection and operations model, and the supporting tools designed to achieve a substantially improved rate of Construction and Demolition Waste (CDW) reuse and recycling for demolition projects in the city, and the creation of new business opportunities for local companies based on optimised valorisation of these material flows.

Tools to be developed are:

1. Life Cycle Assessment for demolition and renovated sites
2. Screening procedures and tool for selective demolition
3. 3D modelling tool for tracking the flows on-site
4. Databank and digital market place for recovered materials
5. Business case development

3. Stakeholders and stakeholder groups in CDW process demonstration

3.1. Group 1. Waste and demolition group

The waste and demolition group consists of authorities and operators who are responsible for waste management and demolition in Mikkeli. They will focus on planning and processing of demolition activities. It includes the decommissioning process as a whole, including the various stages of data collection and documentation. The group is also looking for opportunities to streamline the various stages of the process.

- City of Mikkeli:
 - waste and environmental authorities are working closely with CityLoops partners to get processes more efficient using new methods incl. digitalisation
- Metsäsairila Ltd:
 - municipal waste management company
- Toimintakeskus ry:
 - operational circularity centre
- Demolition contractor:
 - Will be announced in September 2020. The contract will be made with the City of Mikkeli and the demolition company.

3.2. Group 2: Construction and business cases

The construction and business cases group consists of authorities, but companies and experts also play an important role to get new ideas and business possibilities. The construction and business cases group is investigating the reuse of demolition waste in construction. Safety and health aspects must also be taken into account in this work, and reusable materials must comply with current quality requirements. The group is seeking cost savings from various stages of the process as well as new business models to utilise demolition materials.

- City of Mikkeli:
 - infrastructure department, monitoring
- Waste and environmental authorities:

- legal entities in giving information about harmful obstacles and risks of reusing demolition materials
- Metsäsairila Ltd:
 - municipal waste management company
- Construction companies (after demonstration phase):
 - possibilities to reuse demolition materials, new innovations and business models
- Environmental authorities:
 - to make sure the environmental and health issues will be noticed
- CDW experts:
 - new business ideas and value chain

3.3. Group 3. Additional stakeholders

Additional stakeholders are organisations which are developing or expanding circularity in different sectors and have projects concerning circularity in the demolition and construction sector. Those stakeholders are important especially in networking and communicating nationally. Close collaboration with additional stakeholders is important role for being able to do the regional replication effectively.

- Waste transport companies
- Citizens
- Motiva:
 - state owned circularity development organization, materiaalitori
- Ministry of Environment,
 - built environment, demolition surveys, guidance
- VTT Technical Research Centre of Finland Ltd
 - pre-demolition audits project PARADE
- Municipalities in the construction sector
- The City of Helsinki
 - demolition projects: Hyppy and Circuit
- The University of Applied Sciences Turku:
 - demolition and construction projects including water

4. Timeline, tools, activities and stakeholders

4.1. Inception and preparation phase (M1-18)

Timeline: During the Inception and preparation phase, stakeholder groups will be gathering once a month.

Tool: Life Cycle Assessment for demolition and renovated sites

Activities: Report/written guidelines describing methodology for assessing life cycle/environmental effects of demolition and renovation sites.

This is a report about testing the methodology/guidelines for demonstration sites in Mikkeli. Tools/procedures are being developed by Roskilde/HT, Mikkeli and Seville.

Mikkeli aims to exchange and align to develop a CityLoops pre-demolition approach.

Stakeholders involved: Group 2, especially the City of Mikkeli.

Tool: Screening procedures and tool for selective demolition

Activities: Written guidelines for pre-demolition inspection and operations model. This will be a report about testing the methodology and guidelines for demonstration sites in Mikkeli. Tools/procedures are being developed by Roskilde/HT, Mikkeli and Seville. Mikkeli aims to exchange and align here to develop a CityLoops pre-demolition approach.

Stakeholders involved: Group 1.

Tool: 3D modelling tool for tracking the flows of on-site

Activities: A model for drone imaging will be developed. It will be adapted for the use on demolition sites to track material flows and then tested in the CityLoops demonstration sites. This will allow the documentation and modelling of material flows during the demonstrations to help track and estimate the quantities of different material already on site. The work is based on existing tools and experiences from mining sector.

The methodology will be tested on 2-3 demolition sites located in Mikkeli.

Timeframe for developing the tool: M 1-18

Lead partner: Xamk, Other partners involved: Miksei

Stakeholders involved: Group 1.

Tool: Databank and digital marketplace for recovered materials

Activities: Two connected online platforms will be created. A materials databank will provide information on the quantities of different materials available on the demolition sites. This will allow an effective assessment of the Circular Economy opportunities where waste is generated and will serve as a tool for traceability.

An online digital marketplace will be established in and tested in the demo sites. It will enable the recycling of CDW and materials, services, logistics and workforce. The main users will be private and public manufacturing companies who want to sell demolition waste and organisations who want to buy “waste” material to use in their processes. There is also a role for the logistics partners who want to provide storage and transportation services. The work is based on existing tools and experiences from manufacturing industry.

Timeframe for developing the tool: M 1-18

Lead partner: Miksei, Other partners involved: XAMK

Stakeholders involved in: Groups 1-3

4.2. Demonstration phase (M18-44)

Timeline: During the demonstration phase, stakeholder groups will be gathering 6 to 9 times per year.

Activities: The tools developed will be tested on two sites, Pankalampi and Moisio, in the City of Mikkeli. For each site, the demolition plan developed in Phase 1 will be executed and constantly updated over the demonstration phase. During the demolition work, material flows will be tracked using the 3D modelling tool. The information will be exported into a material databank and made available through the online marketplace. Sampling and analysis of materials collected on the demo sites will also be carried out, to help further refine the model.

Lead partner: Miksei, Other partner involved: Xamk

Tools:

- 3D modelling tool for tracking the flows on-site
- Databank and digital market place for recovered materials
- Business case development

Stakeholders involved in: Group 2 and 3.

4.3. Replication phase (M36-48)

Timeline: During the Replication phase, stakeholder groups will be gathering 6 times.

Activities: Following the demonstration, and revision of procedures and tools as appropriate, the goal is to establish the pre-demolition and operations model and use of the material databank and online marketplace as standard practice within the South Savo region to further upscale its application.

The local stakeholder partnership within South Savo region will be expanded during the replication phase. There will be regional meetings and seminars organized within South Savo region during the replication phase. Results will also be published in circular economy seminars in Finland and in Europe.

Tools: All tools will be used in replication

- Life Cycle Assessment for demolition and renovated sites
- Screening procedures and tool for selective demolition
- 3D modelling tool for tracking the flows of on-site
- Databank and digital market place for recovered materials
- Business case development

Stakeholders involved: Group 3 in particular. Other stakeholders to be identified during the implementation phase.

5. Stakeholder engagement methods

The project plan focus on which are the fields we need collaboration with different stakeholders. Close collaboration with stakeholders will strengthen the influence of CityLoops project, but it will also help project team to succeed in getting the targets of the project. After choosing the stakeholders the project team is interested in collaborating with, they will be contacted personally by telephone and personal meetings. Personal contacts give best possibility to explain the CityLoops project, also ask questions and get new ideas. Personal contacts will take also place in meetings, seminars, field visits and excursions. These engagements are arranged online in the current pandemic situation. Digital tools are utilised, E-mails, press releases, newsletter, articles, web pages and social media are used to contact and engage stakeholders.

6. Plan for Stakeholder engagement

Meetings are arranged in person or online. Meetings with all the stakeholder groups have been arranged by June 2020:

- The waste and demolition group has gathered four times
- The construction and business cases group has gathered twice
- Additional stakeholders have been engaged

Responsible for engaging the stakeholder:

- Miksei is responsible of collaboration with groups 1,2 and 3. Xamk is a team partner in each group.

Key risks and risk mitigation measures:

- Personnel changes: specialists working in their organisations as a stakeholder role with CityLoops may change their employee. This will be mitigated through a deputy procedure
- Pandemic situation: online meetings will be organised



CityLoops is an EU-funded project focusing on construction and demolition waste (CDW), including soil, and organic waste (OW), where seven European cities are piloting solutions to be more circular.

Høje-Taastrup and Roskilde (Denmark), Mikkeli (Finland), Apeldoorn (the Netherlands), Bodø (Norway), Porto (Portugal) and Seville (Spain) are the seven cities implementing a series of demonstration actions on CDW and OW, and developing and testing over 30 new tools and processes.

Alongside these, a sector-wide circularity assessment and an urban circularity assessment are to be carried out in each of the cities. The former, to optimise the demonstration activities, whereas the latter to enable cities to effectively integrate circularity into planning and decision making. Another two key aspect of CityLoops are stakeholder engagement and circular procurement.

CityLoops runs from October 2019 until September 2023.



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