

Circular Solutions in Area Development 2030

INTRODUCTION

We are an interdisciplinary group of third year engineering students that work together with BAM Infrastructure to create sustainable living solutions for the next generations.

Our main goal is to make sure that BAM Infra can respond to the future wishes of the target group. In addition, the sustainability goals set by BAM itself will also have to be fulfilled. By achieving these targets, BAM and our group want to generate real impact and contribute to a more sustainable future.



JOURNEY & LEARNINGS

At the start our project scope and eventual result were a bit fuzzy. We had to decide which direction to go in and how to come to an end solution. We had to define the terms infrastructure and sustainability to make good progress. Doing a lot of research into BAM and our target group, we managed to come up with many ideas and then narrow our ideas down to two strong concepts. We then split our group in half and worked on those concepts that way.

Our group is very diverse in the sense that we have students from ME (WTB), IDE (IPO), IE (WTB) and Automotive BM. It was inspiring to see that everyone knew how to use their skills for our project but were also open to learning new things.

Not all of us are experienced with these kinds of projects so it is nice to see everyone working together. Our teamwork has been really good; we work well together which has had a big impact on our progress and what we will deliver.

OUTCOME & IMPACT

Our final products are two concepts. One is a grey water system for a neighborhood. We have designed modular filters made with circular materials and are currently testing the prototypes. The grey water is collected from rain and houses and then filtered to clean water. This will not be drinking water, but it is clean enough to use around the house and garden.

The other concept we have is a community workshop where neighbors can work on their projects, share materials and tools and socialize. The workshop is built from circular materials and is supposed to encourage people towards sustainability.



We hope our concepts make a difference in how BAM (and maybe other companies) design new solutions for our generation and the next. We also see that within our target group there is a lot of variety in how much people care about sustainability. We hope that we can encourage people to be more open-minded.

We are happy to show our prototypes and explain in detail how our concepts work. For the grey water system, the results of our testing will be interesting to evaluate. We hope to show that our concept is realistic and can be implemented on a bigger scale. For the community workshop, we are currently working on the visual aspect and want to showcase the final concept together with the materials we used.