



Hackathon: the circular diaper

Team 6 - ARPASEL

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Developing a circular business case for diapers & incontinence care products

GLOBAL PROBLEM

2 kg/day⁽¹⁾

Every year, humans produce **millions of tons of waste**, there are **no signs of slowing down**.

Dramatic consequences

on the planet such as air pollution, climate change, and the **general public is increasingly concerned**

3.4 billion tons⁽²⁾

Of waste by **2050**, an **increase of 70%** from current levels

DIAPER PROBLEM

Absorbent hygiene product (AHP) waste contribute between **2-4% of the total Municipal Solid Waste** ³

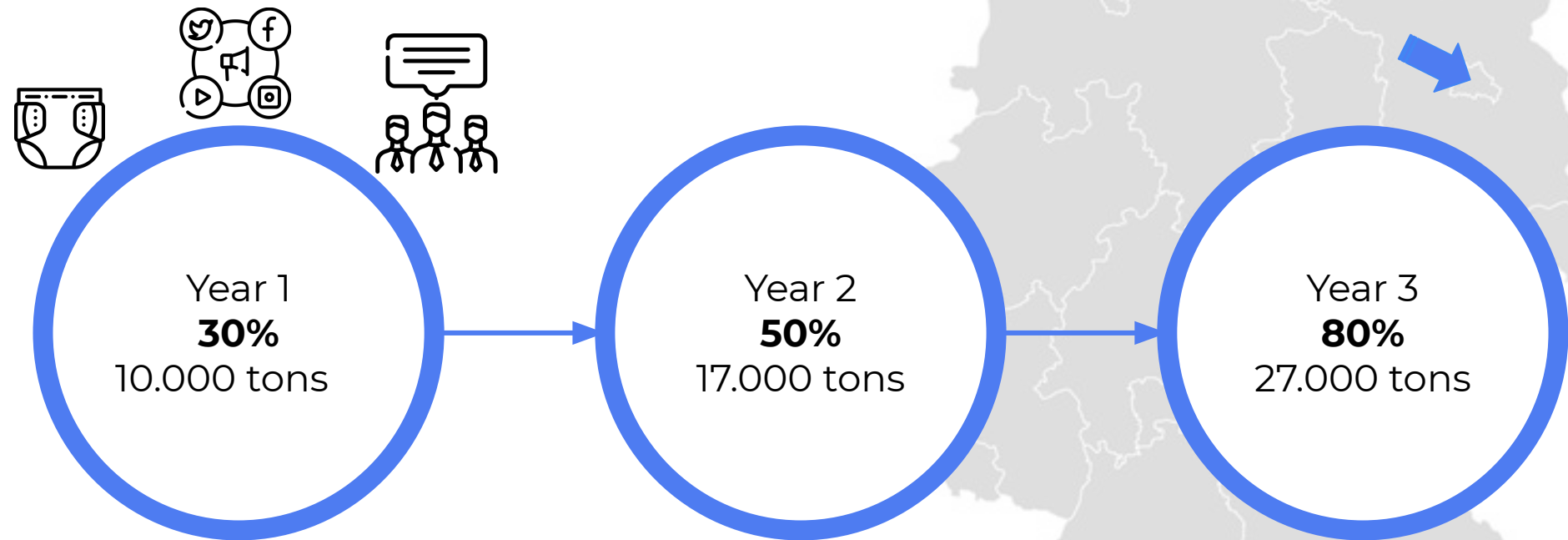
AHP waste in Europe amounts to **8,500,000 tons per year** ³



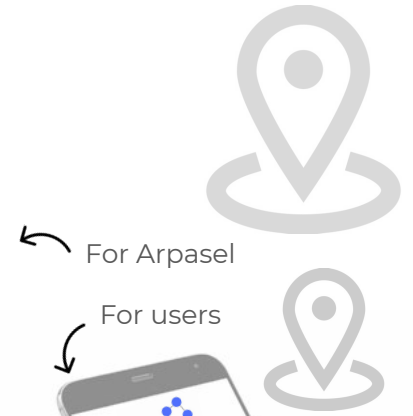
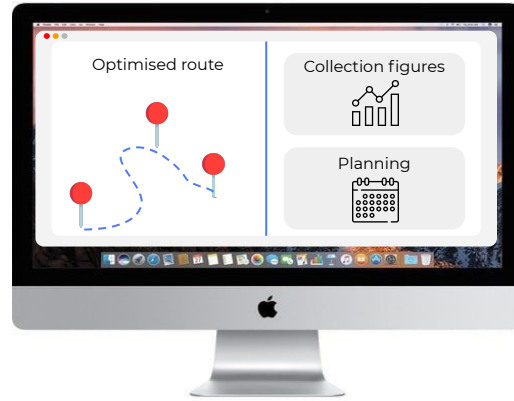
MISSION

*“Offering a **circular** business case for diapers and incontinence care products by using an **app** to **connect the dots** in waste management, **collection and recycling**”*

MARKET SIZE



COLLECTION



For Arpasel

For users



Smart **app** for network

Indicate if bin is full
& ready for collection

Partnership with transportation

Efficient pick up routes



RECYCLING



Recycled Superabsorbent polymer



Constitutes the **major portion** of AHP (~28%)

Why SPA?



The **most polluting element** after Pulp (25% GWP_e)



Feasible & **good quality of extraction**

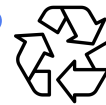


Market valued at **\$149B** by 2026 (6% CAGR)



Dramatic increase of **fire hazards**

Why roofing?



Long term and sustainable reuse



Joint venture with Berry Global

UNIQUE FEATURES



Learning & adaptive app



Virtuous circle via network effect



Sustainable & innovative reuse of SAPs



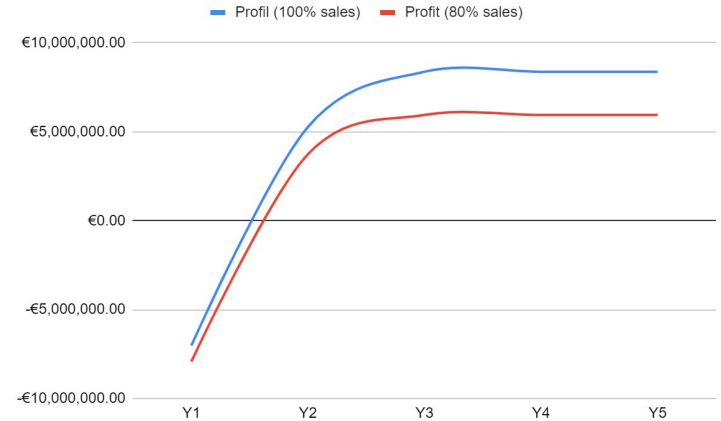
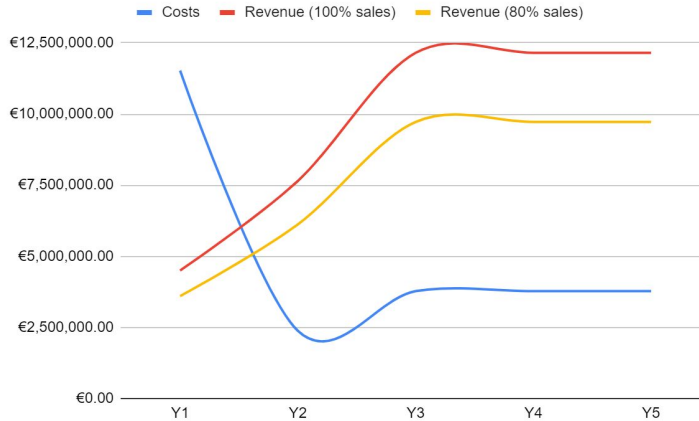
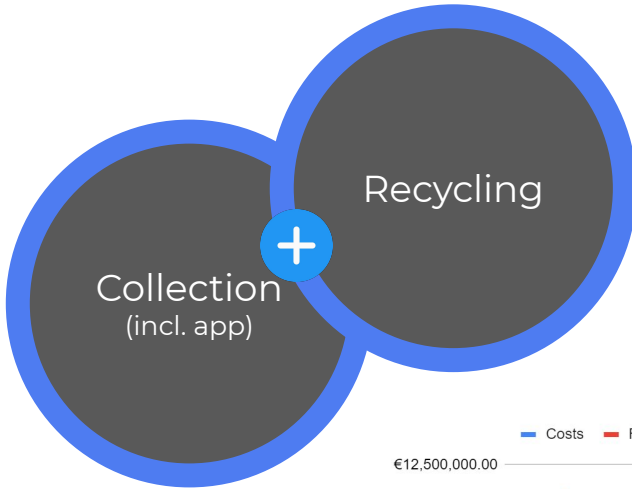
Triple win situation



REVENUE

A sustainable business model

For the environment, society, and profits



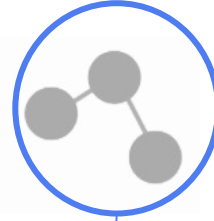
MILESTONES



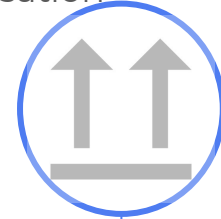
Building the app



Creating the recycling facility



Empowering AI for constant optimisation



Upscaling to new geographies and client segments

