

## Public summary

It was asked by the company PCV Group to make a casing design to implement an innovative sustainable deodorant on the market in a successful way. PCV Group works with two different prototypes: a 'works like real' and 'looks like real'. At this point, only a 'works like real' prototype exists.

The aim of this project: *"Implementing a technologically innovative sustainable deodorant on the market by understanding the market, applying ergonomic elements and outer design."*

To successfully do this, a 'looks like real' prototype needs to be produced. Before starting off making a looks like real prototype, the works like real prototype needs to be understood. The deodorant is not driven by propellants. It needs to be mechanically charged before it can be used. It has a nozzle, which is developed by a development partner of the PCV Group, which produces a soft mist. The mechanism that is produced by the PCV Group offers a continuous spray experience. The deodorant consists out of a durable and disposable part. The durable part is the main casing which must last for about four years and the disposable part is the cartridge that has a reservoir with the fragrance. A lid is attached to the back of the bottle to make it possible to replace the cartridge by the end-user.

To tackle this assignment, it is parted into four different sections: technical aspect, stakeholder mapping, ergonomics, and design process. The section technical aspect focusses on the mechanism of the works like real prototype and looks where the constrains and free space of the mechanism is in order to create an sustainable looking casing for the deodorant bottle in the end. The section stakeholder mapping will give an overview of all the important stakeholders to target for implementing the new sustainable deodorant on the market. The design will be focussed on the needs and wants of the end-users and the suppliers of the fragrance. The section ergonomics focusses on the physical and cognitive ergonomics opportunities for the deodorant bottle and how this can be implemented in the design. The section design process will focus on all the steps that need to be taken to go from an idea generation to a final prototype. Aspects like color choice, material use, infographic design, and branding are covered in this process as well.

By the use of the market trend sustainability, it is chosen to make use of the colors green, brown, and white. Furthermore, natural elements are brought back in the surroundings. All the buttons of the designed bottle are colored green and the main body of the bottle is colored white. There is a window integrated on the main body to indicate which fragrance you are using.

The final result of this assignment is a proposition on how the final concept could look like with its ergonomic design; the outer casing design; aspects that differentiates itself from other (sustainable) deodorants; and an overview of how it can be branded in an specific environment. Furthermore, a physical final prototype is provided to get a real interaction with the designed product. *Figure 1* shows the described final deliverables of this project.



**Figure 1** Final deliverables