

**Project title:**

Design for recycling of medical consumables (reusables and disposables). Guidelines and new design methods.

**The challenge to solve:**

Although other circular strategies, like reuse, repair and refurbishment, can lead to a higher resources retention, recycling is the only strategy that can be and should be applied to any type of product. The Healthcare sector is constantly growing, and with it the quantity of consumable devices (reusable and disposable) we produce every year. Although some of them are considered medical waste, and therefore incinerated by law, many others could actually be recycled if properly designed.

Optimizing the design of consumables to enable the highest recycling yield is essential to increase the amount of products recycled. To do so, design for recycling guidelines and methods must be applied and considered in early stages of the design process. In order to guide and identify effective design solutions, guidelines and methods must be investigated and developed together with recycling stakeholders, which have years of practical experience in dismantling and recovering materials from this type of products.

**The main objectives of this project are:**

- Investigate opportunities and roadblocks determined by regulations and sorting practices/awareness in hospitals
- Mapping the different type of recycling stakeholders for different type of consumables categories
- Investigating design guidelines based on literature and interviews/co-creation sessions with recyclers and hospitals
- Creating a list of guidelines, easy to interpret and implement in early stages of the development process
- Striving to develop a new design method or tool that can further guide a correct product design for recycling and identification of solutions/alternatives

**Who you will work with:**

You will be mainly working with a team of circular design experts, part of Philips Experience Design. We focus on different aspects related to the circular economy and we support Philips businesses to achieve our company level sustainability ambitions.

**Who we are looking for:**

We are looking for a motivated IPD student, with good technical knowledge and a passion and initial knowledge about circular product design. The student is expected to be able to work independently, making sure to create and respect planning and deadlines and to keep key stakeholders properly involved.

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