# A LIVING LAB FOR A PLASTIC-FREE TERSCHELLING

## The background

The idea of a plastic free Terschelling is not a new one – a group of stakeholders have been involved in trying to make Terschelling plastic free by 2025 for quite some time. NHL University of applied sciences has been involved in this process from the beginning. The Wadden Plasticvrij conference set things in motion for the stakeholders involved in the initiative. The initial challenge my research aimed to address was how to facilitate this transition. The idea that I ended up running with was to get the Terschelling businesses who wanted to go plastic free together in a Living Lab format, where they could collaborate on ideas to assist in making their businesses plastic free, as well as to participate in the innovation process (Ie. researching and testing new products).



### Introduction

The introduction addressed the wider significance of the study and how a Living Lab setting can essentially be seen as a "transition arena" (Geels and Schot) that could help to spread circular practices, products or services higher up the "systems hierarchy" through collaborating on sustainable innovations.

Terschelling's experience of the MSC Zoe disaster and the day to day washing up of plastic waste meant there was motivation from the side of businesses on the island to reduce both the amount of plastic they use in their operations, and to help reduce existing plastic waste on the island

Research question: "How can the formation of a Living Lab assist in the transition towards a plastic-free Terschelling?"



# Theory and Methodology

As the project lead, NHL University are involved in trying to help businesses and communities become more 'circular' in their practices. I thought this was an important concept, so I used Weetman's model of a circular economy in practice concerning components, materials and products, which is divided into upstream and downstream strategies. I also used the multilevel design model from Brezet and Joore as this conceptualizes how innovations at one level of society, e.g. the local level on Terschelling can help affect change "higher up" the "systems hierarchy", for example at the regional or national level.

I used the Delphi methodology,, whereby experts in a given field (in this case Living Labs and Terschelling) are interviewed in order for the researcher to delve into and understand the problem and the potential colutions at hand.

# **Findings and Conclusion**

The paper found that due to the covid-19 situation, the businesses had increased the amount of plastic they were using in their operations, as most of the original nine stakeholders were in the catering industry. Therefore, an idea was tabled that the Living Lab could first address how a future sustainable takeaway system could look on the island. I found some good contacts to help in this – a R&D lead from a company that develops biodegradable cups and other items (an upstream strategy). NHL were seen to be the main player in plastic reuse (a downstream strategy) as their 'circular design lab' has a large plastic shredder capable of repurposing plastic waste.

Covid-19 also meant that there were issues that need to be addressed soon on the island, such as future sustainable transport. As an example, when a ferry arrives at the port, people stream onto the buses, and this way of working is not compatible with social distancing. So could the Living Lab be a place where the stakeholders could discuss how a new bike hire system could work? Sustainable solutions to the many problems were seen to be coherent with many of the problems the covid-19 crisis was presenting

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