A sizeable fraction of marine microplastics pollution derives from the ‘shedding’ of textiles microfibres. Most efforts to date were focused on reducing microfibres shedding at the consumption stage (during clothes washing). There is a low level of awareness amongst apparel and textile companies about the impact of microfibre shed from the pre-consumer (production) stage. Forum for the Future (Forum) is working with a major textile manufacturing firm in Southeast Asia for global brands to improve industry understanding and awareness of microfiber shedding at source (during the manufacture processes), promote the implementation of manufacturing processes that reduce shedding, and catalyze industry action for the branding of products with low microfibre shedding properties.

Forum started its research project in March 2021 and planning to conclude this study by end of November 2022. The project team conducted a baseline assessment of the different manufacturing processes to identify the textile processing steps that are contributing most to microfibre release. This stage concluded that heating setting promotes the release of microfibres among the other processes. The results of this baseline assessment showed that microfibres released during the textile process are several-folds higher than during the domestic washing of clothes and lint is not effective to remove the fibre in the discharged water.

The project team, with the support of the operations team, investigated different options to reduce microfiber shedding and check the impacts of these proposed measures on the quality of the produced textile.

The project will conclude in November 2022 with a final report on the results of the baseline assessment and the proposed mitigation measures to reduce microfiber shedding to be submitted to the OIC. The project team is also planning to conduct a final workshop and a promotional capstone event to present the results and outcomes of the project to a wider global audience.

Forum is currently looking at two possible ways of expanding the work and impact of this project by: 1) engaging brands and their suppliers on the microfibres challenge through dedicated webinars or workshops to develop the foundation of strategic conversations between progress brands and their suppliers (scaling up awareness and action); and 2) bringing together a group of progressive industry stakeholders (brands, manufacturers, other civil society and financial actors etc) to enable new ways of collaboration to systemically tackle the microfibres and other sustainability challenges.