



Infinite Textiles

The Case For Infinite Textiles Recycling Scheme

FEBRUARY 2022



INTRODUCTION

Our aim is to provide a working solution to the industry and form a platform to explore and develop various opportunities in recycling end-of-life textiles. Scope of the project to include all flatwork linens and towelling with garments being added in phase two.

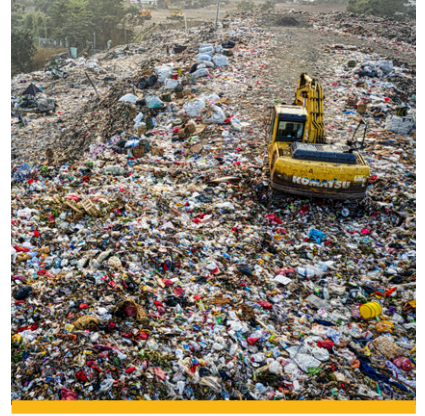
The project will logistically be a challenge, however, we believe the results of delivering this scheme will return tenfold advantages to the industry. We are working with the country's ports, recyclers, logistics and technology partners to deliver a valuable recycling operation for the UK commercial laundry industry.

The strength of the scheme will be its recognisability with the industry's customer base. The TSA's working partnership with UKH and WRAP will prove invaluable in the coming months. An effective communication campaign is planned on all platforms to raise the awareness and develop the Infinite Textiles™ brand among circular economy bodies and the wider general public.



**A CIRCULAR
ECONOMY
A SUSTAINABLE
FUTURE.**

THE REASONS



WHY DO IT?

There is growing pressures to manage all waste streams much more responsibly than is current practice. These are likely to be driven by both legislation but also customer sustainability objectives which get driven into the supply chain as a relatively simple option. By formatting now a certifiable industry based scheme we stay in front of the curve and position the industry and its members with the opportunity to demonstrate the benefits of commercial laundry and its circular credentials.

- **Waste Framework Directive (with UK amendments)**
- **Showcase the circular credentials of the industry**
- **Ethics: It's the right thing to do!**
- **Deliverable: We have the volumes to make it viable for all members**
- **'On Message' for our staff, our customers and their customers**

The evidence is well documented, dozens of studies have demonstrated the benefits of re-use/re-cycle. With the potential of over 6,000 tonnes a year of laundry hospitality textiles to be recycled, the saving in water, chemicals and carbon are enormous. If the industry can come together on this key project, we really will be making a difference to the environment. This will be the largest laundry industry textile recycling project in the world.

THE OPTIONS...

1 Do Nothing. We understand the industry and the wider picture may be to 'do nothing and carry on as normal'. However, this is irresponsible and potentially damaging for our industry image.

2 Individual laundry operators handle themselves. The biggest laundries may be able to develop and implement a fibre-to-fibre recycling route. However, the costs may be much higher to achieve this. The overall process will be fragmented and smaller to medium sized laundries will miss out on scale and a large portion of the industry will remain non-circular.

3 Infinite Textiles™ Scheme – We believe introducing this scheme will achieve the best results in terms of visibility, scale and costs.



PROCESS FLOW REUSE



The scheme does not only cover end-of-life, in fact that's just the last stage. The certification process starts with sourcing the fibres and includes the specification and manufacturing, the washing, inspection and even engages the customer base in how they can play their part in extending the life of the linen. Only then do we start the recycling process.

LAUNDRY PROCESS



Get all this right and we will have already saved 1000's of tonnes a year.

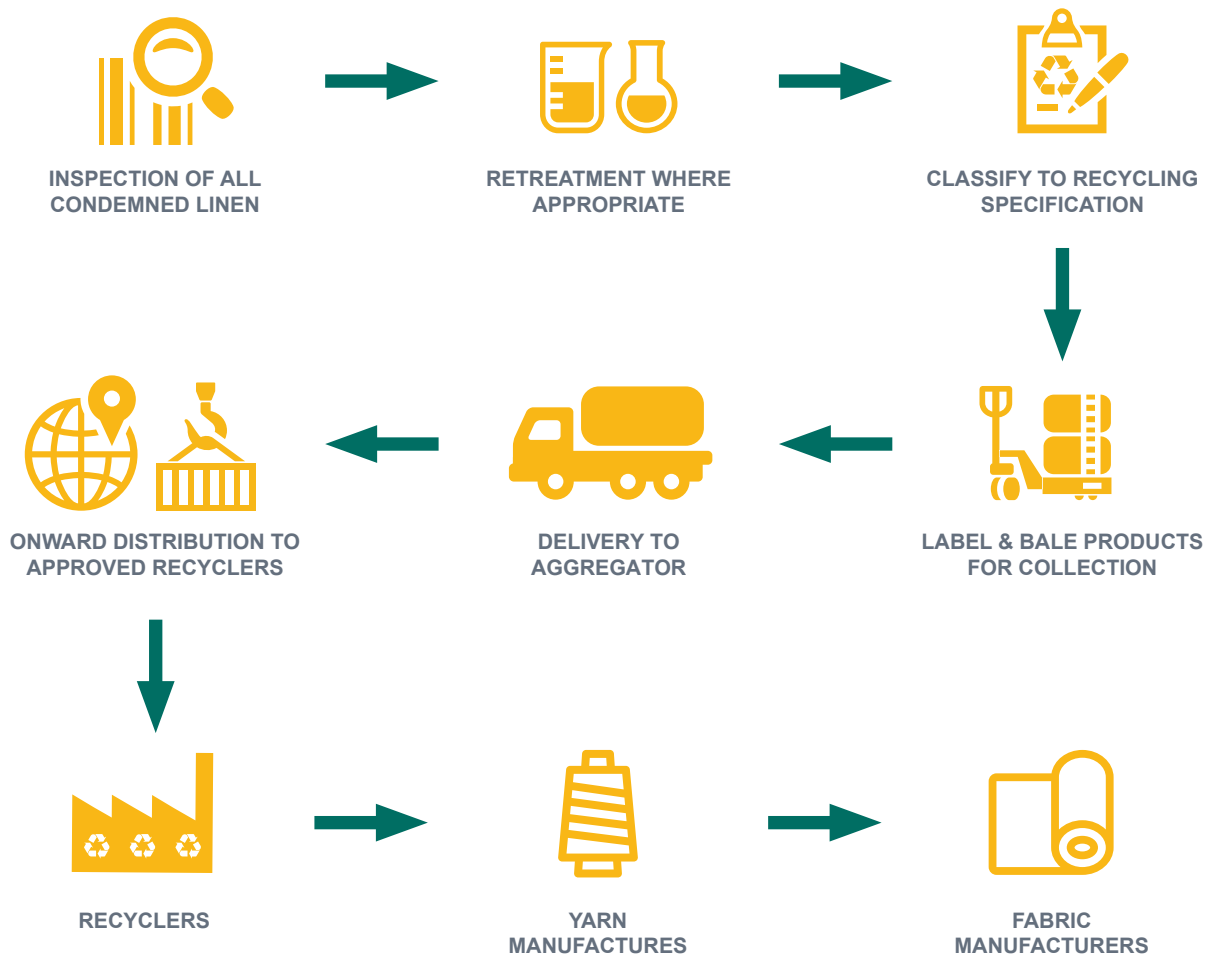


PROCESS FLOW RECYCLE



Now we move onto the recycling as a product reaches the end of its useful life.

END-OF-LIFE PROCESS



THE NUMBERS



THE SCHEME IN NUMBERS

As an industry we have mastered the art of reusing textile articles. It's what we are good at and now it's time for us take the opportunity to close the loop and make our industry, a leader in circular use of products.

It has been reported that the energy required for the reuse or recycling process of polyester is only 1.8% of the total energy consumed by the virgin fibre. Also, reuse of one tonne of cotton fibre needs only 2.6% of the energy required for the virgin material. Therefore, recycling and reuse are important processes to reduce carbon footprint of textiles.

The emission of CO² in case of natural fibres occurs during preparation, planting, and field operations (weed control, mechanical irrigation, pest control, and fertilizers), harvesting, and yields. During production of natural fibres, normally two types of fertilisers are used such as manure and synthetic chemicals. The use of synthetic fertilisers is a main component of conventional agriculture leading to significant carbon footprint. The production of one tonne of nitrogen fertiliser emits approximately seven tons of CO² equivalent Green House Gases.

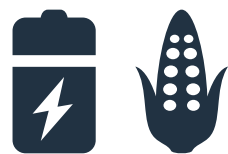
The carbon and water numbers are definitely on the side of reuse and recycle.



**TENS OF
THOUSANDS**
TONNES OF CARBON
PER ANNUM



**BILLIONS
OF LITRES OF
WATER SAVED**



**SIGNIFICANT
SAVINGS**
IN CULTIVATION &
PRODUCTION REUSE



COMMERCIALS



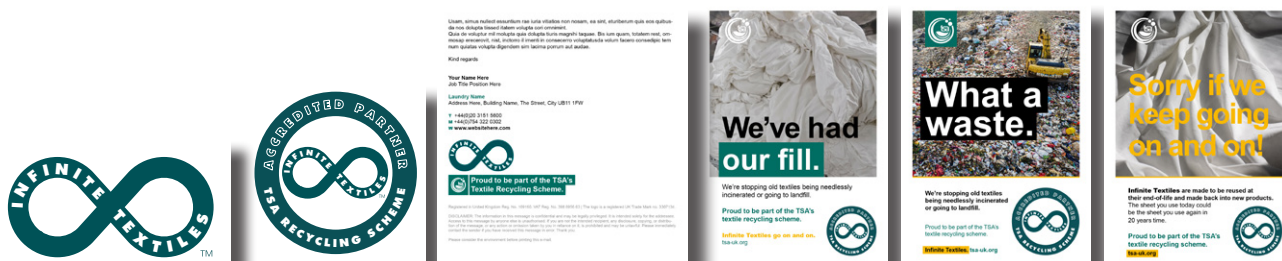
HOW THINGS STACK UP

The current price for a dry, well-sorted and packaged product delivered to Sunderland Port is at £400 per tonne. The Port estimates a £20 charge handling fee per tonne. The logistics costs will fluctuate depending on location. Based on a full 30-tonne load, curtain-sider truck, an average price per tonne is between £15 (within 150 miles of Sunderland) and £26 (for the furthest locations). The TSA will support a network of coordinated pick up which will help smaller laundry sites improve efficiencies.

There will be an admin fee, charged by the TSA to administer and manage the scheme. Currently, this is estimated at 5% for TSA members and 15% for non members.

OUTPUT

- Scheme start-up pack
- Webinars and training for all scheme participants
- Advice and support on recycling best practices
- National PR campaign
- Access to online platform to track volumes and revenue lines
- Evidence of compliance for Waste Framework Directive
- Support certification with ISO 14001, BS8001
- The scheme is aligned with the Recycled Claim Standard (RCS) that sets requirements for third-party certification of Recycled input and chain of custody.
- Complaint with circular economy certification – Cradle to Cradle
- Audited by UKAS accredited certification body
- Marketing literature and support materials



WORKING
TOGETHER,

STRONGER
PARTNERSHIPS.



Proud to be part of the TSA's
Textile Recycling Scheme.

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