

Fabricating Innovation

Case Study 009



WISP worked with Farbe Designs and CSK Material Handling to divert 20 tonnes of Textile waste from landfill annually, while also creating R8 000 in economic benefits per year.

The Organisations

Farbe Designs and CSK Material Handling

The Challenge

Textile manufacturing companies generate large volumes of mixed dry recyclables, including paper, plastic and textiles, with the largest stream being textile offcuts. Recycling solutions for plastics and paper are available; however, solutions for the recycling of large-volume textile waste streams have proven to be somewhat lacking in the Western Cape.

Farbe Designs is a dynamic, Stellenbosch-based clothing company with over 20 years of experience in the industry. It specialises in the development and manufacturing of custom-made, top-quality promotional, corporate, sports- and leisurewear. It contacted Stellenbosch Municipality to ask for assistance in implementing a waste management programme at its site. Stellenbosch Municipality, in turn, contacted WISP, which was happy to oblige. WISP undertook an audit of Farbe Designs' facility and was told that Farbe currently produces approximately 2 tonnes of underutilised textile, plastic and paper resources per month.

CSK Material Handling is a KwaZulu-Natal-based company that collects plastics, paper and textiles for later recycling. CSK has a baling facility in Epping, Cape Town, which operates 24 hours a day. It collects resources throughout the Western Cape, and has both a heavy loading (10 tonne) and a small loading (1.5 tonne) vehicle. CSK currently bales approximately 80 tonnes of textile waste per month, but is capable of — and eager to expand capacity to — a larger amount. The staff separate and sort the recyclable material that arrives at the facility;

the resources are then baled and stockpiled before being transported to KwaZulu-Natal using a heavyloading link.

WISP introduced CSK Material Handling and Farbe Designs to each other, after which CSK agreed to collect Farbe Designs' dry recyclable materials, including plastic and textile waste.

The Solution

As there is no textile recycler in the Western Cape, CSK's sorted and baled materials — along with valuable recyclables — are sent to KwaZulu-Natal. There the textiles are shredded to produce fibres, which are sold to various manufacturers of underfelt for carpets. The rest of the dry recyclable material, plastic and paper is recycled normally and used to make new plastic bags or recycled paper.

WISP worked with CSK Material Handling and Farbe Designs to divert approximately 20 tonnes of textile and recyclable waste each year from landfill, creating nearly R8 000 per annum in economic benefits.

The Benefits

ECONOMIC BENEFITS



• Farbe Designs potentially saved R8 000 on waste service costs annually.

ENVIRONMENTAL BENEFITS



- A total of 20 tonnes of textile, paper and plastic waste diverted from landfill annually.
- Savings of 400 tonnes of fossil greenhouse gases — roughly equivalent to 246 30-year-old trees.





About WISP

The Western Cape Industrial Symbiosis Programme (WISP) develops mutually profitable links between companies from all industrial sectors, so that under-utilised resources such as energy and water, and/or materials from one company can be recovered, reprocessed and re-used by others.

Driven by Business

The programme uses actual business opportunities as the mechanism for encouraging resource efficiency. Its holistic approach sees it actively dealing with ALL resources including water, energy, materials, logistics, assets and expertise. The programme is based on the highly successful national programme in the UK (NISP), which demonstrated that industrial symbiosis has the potential to significantly reduce industrial and commercial waste and comprehensively lessen the adverse environmental impacts of business.

Free Membership

WISP is a free facilitation service initiated by the Western Cape Government and delivered by the sector development agency GreenCape. WISP enables synergies to happen by filling the gaps that its members, especially SMEs, could experience due to the lack of time or dedicated expertise needed to identify and implement resource, waste and energy efficient practices. The diversity of the industries in which WISP operates, and the variety and size of its business members, means that WISP has the potential to generate significant economic, environmental and social benefits from the synergies and projects that it brings about.

Partnership with Purpose

WISP works hand in hand with leading trade associations, manufacturers and other organisations to add real value to business. We are working in collaboration with the Cape Chamber of Commerce and Industry (CCOC), National Cleaner Production Centre (NCPC), Economic Development Partnership (EDP) and the City of Cape Town.

Contact us to become a member and get involved!

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WISP is delivered by

GreenCape

GreenCape was established to promote the development of the green economy in the the Western Cape Province. We assist viable green businesses and potential investors in the green economy to remove barriers to their establishment and growth. Our aim is to help unlock the investment and employment potential of green business,

technologies and manufacturing and put the province on course to become the green economy hub for Sub-Saharan Africa. This work, in turn, contributes to improving the resource efficiency, carbon intensity and resilience of the regional economy.

WISP is funded by:









