

An E-as-y Solution for E-waste

Case Study 003



The Organisations

Duferco Steel & Cape E-Waste

Summary

WISP facilitated the collection of electronic waste (e-waste) from two members for recycling of components and safe disposal for non-recyclable components.

Background

E-waste is one of the fastest growing waste streams in SA. E-waste is classified as hazardous and poses potential environmental and human health hazards. Given that e-waste contains toxic metals and compounds, it must be safely disposed of at a landfill site for hazardous materials. The high disposal costs at such landfills, coupled with the fact that some have stopped accepting e-waste, has created a need to find alternative environmentally friendly and economical ways of dealing with e-waste.

Duferco Steel Processing manufactures cold roll and galvanise steel products for use in the production of fabricated steel products. FS Smit specialises in the production of barrel manufacturing for the wine industry. Although very diverse in production processes, each generate e-waste that requires safe disposal at hazardous landfill site if an alternative was not found. Both companies were introduced at a WISP Business Opportunity Workshop in 2014. Each had sizeable stockpiles of e-waste that Cape E-Waste could re-use.

The Cape E-Waste Solution

Cape E-Waste can dismantle electronic equipment and recover reusable components, with the exception of televisions and monitors which are sold to certified recyclers who ensure that the products are disassembled legally. Metals and plastics recovered are sold as commodities to interested parties like metal and plastic recyclers.

The Benefits

ECONOMIC BENEFITS



Cost savings of R470/tonne of e-waste diverted from landfill, as well as free-of-charge collection

Cape e-waste will generate additional revenue from the sale of re-usable components

ENVIRONMENTAL BENEFITS



Diversion of more than a tonne of hazardous waste from landfill, assisting with the preservation of landfill airspace

Reduced risk of exposure to potentially toxic compounds through proper handling of waste

SOCIAL BENEFITS



Creation of three jobs due to increased e-waste diverted from landfill, requiring additional labour for dismantling



WISP

Western Cape Industrial
Symbiosis Programme

Delivered by GreenCape

Connecting Industry Creating Opportunity

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 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:



Western Cape
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