

The Battery Saga

Case Study 007



WISP assisted The Fugard Theatre to create a partnership with the City of Cape Town's Disaster Risk Management Department and several other charities, for half-used batteries.

The Organisation

The Fugard Theatre

The Challenge

One of several theatres in Cape Town, The Fugard Theatre prides itself on high-quality theatre productions. The performers use up to 25 battery-operated cordless microphones in a production, with each microphone using two AA or AAA batteries. Although 50% of battery capacity is left after each show, the batteries are replaced to ensure the microphones do not fail during a performance. With up to 110 batteries accumulating every week, the theatre had roughly 3 000 half-used batteries stockpiled when WISP was approached.

The Solution

WISP began searching for potential uses for the half-used batteries, as well as a safe disposal service provider for unusable batteries. The team found a homeless shelter, a haven for abused children and an old-age home that could use a small number of batteries in torches, clocks, radios, blood pressure meters and other electronic devices. However, these small-scale batch solutions did not solve the problem of the ever-growing stockpile of batteries.

WISP found the perfect outcome in the City of Cape Town's Disaster Risk Management Department, which committed to taking all The Fugard Theatre's current and future half-used battery stock for use in torches and radios.

The next challenge was to find an end-of-life solution once the batteries were spent, as WISP discovered that there are no battery recycling operations in South Africa. Currently, the most environmentally safe option

for spent batteries is the Uniross battery collection programme, which involves the centralised collection and sorting of waste household batteries. Some are exported for mineral extraction, but the bulk are encapsulated in concrete and disposed of at a hazardous landfill. Given the lack of options, it was decided to send the spent batteries to Uniross for safe disposal.

To deal with the problem at the source, WISP investigated the potential for The Fugard Theatre to switch to recyclable batteries. This would reduce the number of new batteries used by the theatre and the waste created by using non-rechargeables. Unfortunately, this option was not feasible - rechargeable batteries do not currently meet the specifications required for operating the microphones used in theatre production. WISP is continuing its support of prospective battery recycling companies, with the hope that a better solution than landfill can be found in the foreseeable future.

The Benefits

ECONOMIC BENEFITS



 The City of Cape Town is saving R21 000 per year by using The Fugard Theatre's half-used batteries, instead of buying new ones.

ENVIRONMENTAL BENEFITS



- The full potential of the battery is utilised, rather than 50% of the charge being wasted.
- There is a reduction in the extraction of virgin materials for the production of new batteries.

SOCIAL BENEFITS



The City of Cape Town's Disaster Risk
Management Department and the other
charities helped can use the money saved
to provide a better service to the homeless,
abused children and the aged, thereby
improving their quality of life.





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:









