

The National Cleaner Production Centre of South Africa (NCPC-SA), as the national resource efficiency programme of the Department of Trade and Industry (the dti), is the custodian of the Gauteng and KwaZulu-Natal Industrial Symbiosis Programmes (GISP and KISP respectively). A similar programme operates in the Western Cape.

The Industrial Symbiosis Programme (IS Programme) is a free facilitation service that enhances profitability and sustainability. Since its inception the programme has assisted a number of companies.

Gauteng Industrial Symbiosis Programme Highlights Summary

10	Businesses assisted
R1 406 400	Cost savings
3 121 tonnes CO ₂ e	GHG emissions
45 628 (m³)	Industrial water saved
6	New/contract jobs created
235 000 tonnes	Virgin resources use reduction
440 tonnes	Waste diversion from landfill



Case Study 1

Company with waste material: Lancet Laboratories (Pty) Ltd
Sector: Health
Company that needs waste material: SkipWaste (Pty) Ltd
IS Programme year of intervention: 2016
Waste stream type: Paper

Resource	Paper Waste
Summary of intervention	SkipWaste collects Lancet Laboratories' paper waste for recycling. In turn Lancet receives a R1000 rebate per ton of waste from SkipWaste on a monthly basis.
Waste stream	Paper
Landfill diversion (tonnes)	200
GHG emission reduction (CO ₂ /kg/yr)	516
Virgin resource reduction (tonnes)	200
Industrial water saved (m ³)	12,600
Savings (ZAR/yr)	200,000



Case Study 2

Company with waste material:	Enviroserv Waste Management (Pty) Ltd
Sector:	Waste Management
Company that needs waste material:	AJ Polycycling (Pty) Ltd
Sector:	Recycling
IS Programme year of intervention:	2016
Waste stream type:	Polystyrene

Resource	Polystyrene
Summary of intervention	AJ Polycycling collects polystyrene waste at no cost from Enviroserv over an agreed period of time. AJ Polycycling then cleans all the waste and sells it to a fibre company that uses the product in the manufacturing of denim jeans.
Waste stream	Plastic
Landfill diversion (tonnes)	150
GHG emission reduction (CO ₂ /kg/yr)	1917
Virgin resource reduction (tonnes)	150
Industrial water saved (m ³)	28,050
Savings (ZAR/yr)	172,800

Case Study 3

Company with waste material:	Nampak Packaging (Pty) Ltd
Sector:	Packaging manufacturer
Company that needs waste material:	AJ Polycycling (Pty) Ltd
Sector:	Recycling
IS Programme year of intervention:	2016
Waste stream type:	Pollutant

Resource	PET Pellet Waste
Summary of intervention	AJ Polycycling now takes polystyrene waste at a free cost on an agreed time scale; they clean all the polystyrene and sell it to a fibre company that uses these pellets in the manufacture of clothing and jeans.
Waste stream	PET-Plastic
Landfill diversion (tonnes)	20
GHG emission reduction (CO ₂ /kg/yr)	386
Virgin resource reduction (tonnes)	20
Industrial water saved (m ³)	3840
Savings (ZAR/yr)	24,000

Case Study 4

Company with waste material:	Group Five Structured Ingenuity (Pty) Ltd
Sector:	Construction
Company that needs waste material:	KLM Drums (Pty) Ltd
Sector:	Recycling
IS Programme year of intervention:	2016
Waste stream type:	Metal and plastics

Resource	Used Drums
Summary of intervention	KLM Drums would take away used drums from Group Five at a cost of R10 per drum irrespective of whether it is damaged or not, to their facility. KLM Drums then separates damaged and non-damaged ones, washes and repaints them. The drums are sold to clients who use the drums for packaging and transportation of paint and other liquid products.
Waste stream	Metal and plastic
Landfill diversion (tonnes)	80
GHG emission reduction (CO ₂ /kg/yr)	307
Virgin resource reduction (tonnes)	180
Industrial water saved (m ³)	4488
Savings (ZAR/yr)	