

Industrial Symbiosis Programme





Industrial Symbiosis Programme

Connecting industry, creating opportunity

The NCPC-SA, as the national resource efficiency programme of **the dti**, is the custodian of the Gauteng and KwaZulu-Natal Industrial Symbiosis Programmes (GISP and KISP respectively). A similar programme also operates in the Western Cape.

Industrial Symbiosis Programme (ISP) is a free facilitation service which uses an internationally proven industrial symbiosis approach to enhance business profitability and sustainability.

What is industrial symbiosis?

Industrial symbiosis is a resource efficiency approach where unused or residual resources (Material, energy, water, waste, assets, logistics, expertise etc.) of one company are used by another. This results in mutual economic, social and environmental benefits.

Facilitated industrial symbiosis implementation specialists, International Synergies Ltd, define industrial symbiosis as

"...the practice of **bringing together** companies from different sectors to **identify business opportunities** that **keep resources** in the economy in a **perpetual productive cycle** that **avoids waste** – in other words, **the circular economy in action**.

(www.international-synergies.com)



How does ISP work?

ISP uses a facilitation approach to match the under – or unutilised resources of member companies with other member companies who can use them to create new business opportunities. Membership is free of charge as ISP is one of the fully subsidised services of the National Cleaner Production Centre of South Africa (NCPC-SA).

One of the tools used by ISP is Business Opportunity Workshops. At these events, the ISP team will facilitate an interactive session that will allow participants to exchange details about resources they have on-site or resources they need that others may have.

Profit
Sales
New business
Jobs
Utilisation of assets
Innovation
Inward investment
Learning
Knowledge transfer
Industrial Symbiosis
increases

Industrial Symbiosis decreases

CO₂ emissions Landfill costs Use of virgin resources Industrial water usage Hazardous waste Pollution Transport



Joining one of the IS programmes (GISP, KISP or WISP) or attending an industrial symbiosis workshop can help a company:

- Save money on raw materials
- Explore new innovations for wasted or difficult resources
- Generate new business opportunities
- Reduce their carbon footprint and improve their environmental performance



National Industrial Symbiosis Initiatives

GISP is jointly funded and delivered by the NCPC-SA, Gauteng Province Agriculture and Rural Development (GDARD) and the Gauteng Department of Economic Development (GDED) in collaboration with Ekurhuleni Municipality Waste Management Services.

KISP is jointly funded and delivered by the NCPC –SA, Trade and Investment KwaZulu-Natal and the KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs.

The Western Cape Industrial Symbiosis Programme (WISP) in funded by the Western Cape Government Department of Economic Development and Tourism and delivered by GreenCape, a sector development agency for the green economy.

Industrial Symbiosis Internationally

Industrial Symbiosis has made extraordinary contributions to businesses, economies and environmental efforts worldwide. The ISP model is based on the United Kingdom NISP, established in 2005 and will utilise the UK's expertise and support in its early development phase.

In eight years, NISP was able to help UK companies:

- divert 47 million tonnes of industrial waste from landfill
- generate £1 billion in new sales
- reduce carbon emissions by 42 million tonnes
- cut cost by £1 billion by reducing disposal, storage, transport and purchasing costs
- reuse 1.8 million tonnes of hazardous waste
- create and safeguard over 10 000 jobs
- save 60 million tonnes of virgin material
- save 73 million tonnes of industrial water





Benefits of being an ISP member

Increasing profits

Achieved through identifying business opportunities and better management of resources.

Diverse Networking

Bringing together a broad range of industries, sectors and skills.

Universal – Transportation and Water

ISP is not limited to any particular type of resource – it includes energy, expertise, logistics, services, assets, transportation, waste, water.

Demand Driven

ISP is driven by the demands of its member companies.

We All Win

Synergies developed through ISP benefit the economy, environment and society as a whole – sustainability in action

Free Membership

Membership of GISP, KISP and WISP is free for all companies and organisations, regardless of sector, size or turnover. Membership also gives you access to all ISP programmes throughout South Africa.





Gauteng Industrial Symbiosis Programme (GISP)

National Cleaner Production Centre of South Africa

Email: gisp@csir.co.za

KwaZulu-Natal Industrial Symbiosis Programme (KISP)

National Cleaner Production Centre of South Africa

Email: kisp@csir.co.za

General enquiries

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