



INDUSTRIAL EFFICIENCY IN SOUTH AFRICA

ANNUAL HIGHLIGHTS

2023/24

Driving the Transition to a Greener Future



the dtic

Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA



Touching lives through innovation

About the National Cleaner Production Centre South Africa (NCPC)

The National Cleaner Production Centre South Africa is a national support programme that drives the transition of South African industry towards a green economy through appropriate resource efficient and cleaner production (RECP) interventions.

The NCPC's mission

is to drive RECP in industrial and selected commercial and public sectors by equipping them to operate in an efficient, sustainable and competitive manner.

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Ndivhuho Raphulu

The NCPC had a very positive and successful 2023/24 financial year. As part of the CSIR, which is a state-owned organisation, and funded primarily by the Department of Trade, Industry and Competition (**the dtic**), we measure our performance in financial years, but much of the work of the NCPC continues seamlessly over multiple years. However, the year under review saw a lot of action.

- After much groundwork, implementation began in earnest on the UNIDO partnership project, **Strengthened Adaptation Capacity for a Green & Resilient Economy in South Africa**, funded by the Government of Flanders, whilst two new UNIDO projects officially launched – the **Sustainable Energy Systems for Industrial Development** project focuses on driving renewable energy solutions in industrial parks and spaces; and the **Promoting Circular Economy in the Textile and Garment Sector through sustainable Chemical and Waste Management** project will make a significant investment into supporting the CTFL sector over the next five years.
- This was also the first year that the NCPC offered the newly expanded RECP expert level training programme. The new format, consisting of seven different modules, generated unprecedented interest amongst potential trainers and 60 trainers, were developed across the new modules. During the year 483 delegates were trained at 35 training events.
- Work in industrial parks continues unabated through the Global Eco-Industrial Parks Programme (GEIPP) and the on-going partnership with **the dtic** in high impact economic zones. A total of 23 park-level tools and reports across seven parks were produced to assist in the journey to EIPs. UNIDO also confirmed a second phase of the GEIPP until 2029, again funded by the Swiss government.
- Other projects have been new territory for the NCPC, such as the Gauteng government-funded implementation projects, including implementation support for RECP assessments, as well as the Gauteng Green Incentive Programme, through which 17 small and medium enterprises received energy assessments and subsequent solar-PV systems to assist the companies to cope with loadshedding.
- Across all thematic areas, a total of 71 company interventions were completed during the year, comprising 33 industrial symbiosis synergies, 28 technical assistance projects, 10 financial linkages and 22 in-plant assessments which laid the foundation for further interventions in companies to support implementation in 2024/25 and beyond.

Awareness-raising and providing expert insight into critical issues of the green and circular economy remain a critical part of the NCPC's national role. Through industry tools and policy advisories, the centre equips both industry and government to make informed decisions. I urge all readers to visit our website and make use of the free resources available there.

Finally, I wish to express my thanks to all those who made this and every other year possible for the NCPC to keep doing what it does. Our staff, the CSIR leadership and support teams, partners in all industry sectors, provincial government partners, international partners – with a special mention to our colleagues at UNIDO – and of course **the dtic**. Your combined contribution makes it possible for us to look forward to many more years of supporting South African industry in their transition to a greener, more low carbon and sustainable future.

Ndivhuho Raphulu

NCPC Director and Impact Area Manager, CSIR Industry Support Programmes





NCPC tools ensure ongoing knowledge sharing

The NCPC repository of sector and best practice guides, case studies and calculation tools is a free service where industrial parks and companies of all sizes can download practical resources to assist in their sustainability and resource efficiency journey.

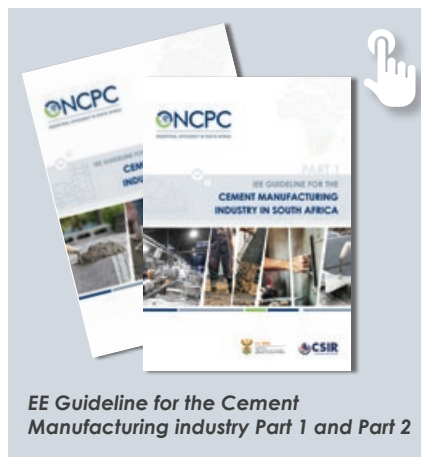
In 2023/24, the NCPC finalised two (2) sector reports and four (4) sector guides. Sector reports were written for key sectors in Mpumalanga and included the Circular Economy Opportunity for Mpumalanga Agriculture and Agri-Processing Sector and the Mpumalanga Steel Sector Review Cluster Development. These reports are available on request.

Three sector guides were the final outputs of the Industrial Energy Efficiency Project and aim to inform industry, financiers and policy makers on the opportunities and risks involved in energy projects in industry. In addition, the RECP and water programme released the **Resource Efficiency for the Cheese and Yoghurt Dairy Sector in South Africa** (see page 8).

 **Download the guides** at <https://www.industrialefficiency.co.za/guides-and-reports/> or **follow the links below**.



Financial Risk Regulation Guideline for EnMS and ESO Projects



EE Guideline for the Cement Manufacturing industry Part 1 and Part 2



IEE Guideline for the Clothing and Textile Industry

CASE STUDY: Energy and Industrial Symbiosis at Mezé Foods

WATCH: the video case study [here](#)



The NCPC assisted local cheese manufacturer Mezé Foods to embrace sustainable practices at their manufacturing plant in Daleside, Gauteng. Mezé Foods, producers of a range of cheeses, dips, pestos, olives and bakery products, requested assistance from the NCPC in 2020 after seeing an internet advertisement to conduct a free energy and material usage evaluation.

In 2021/2022, an energy assessment identified opportunities including compressed air and lighting optimisation and solar PV. Mezé Foods took up many of the recommendations and has reported energy system savings of 23 010 kWh. The assessment positioned Mezé Foods as eligible for the Gauteng Green Support Incentive Programme, which led to the installation of a 156 kWp solar PV system in 2023, which has seen an average of 46% of the factory's energy consumption using solar during load shedding and reduced their electricity bill by 20%.

A material usage assessment revealed opportunities to recover over 1000 tonnes of cheese waste sludge through an industrial symbiosis exchange. This led to a collaboration between Mezé Foods and waste bioconversion company, Khepri Bioscience. The collected sludge serves as input for Khepri Biosciences' bioconversion process, where it is transformed into insect protein, feed oils and fertilizer – leading to a 7% increase in profits for Khepri.



Eco-Industrial parks work continues to thrive

The Eco-Industrial Parks programme had yet another successful year, both through the Swiss-funded Global Eco-Industrial Parks Programme, implemented with the United Nations industrial Development Organization (UNIDO), and in the national eco-industrial parks advisory and support work with **the dtic**.

The year kicked off with a National Industrial Parks Summit which gathered more 100 industrial parks participants and experts in April 2023. This was followed by a series of workshops and engagements to encourage information sharing and the transition from traditional industrial park to eco-industrial parks. The EIP Roundtable also made significant strides, with the database growing to over 400 participants.

The NCPC conducted studies and technical advice at eight industrial parks: Ekandustria, Phuthaditjhaba, Isithebe, Nkowankowa, Seshego, Isithebe, Lebowakgomo and East London IDZ.

In addition, three best practice guides were developed for industry use, including the **Sustainable Building Norms and Standards for Eco-Industrial Parks in South Africa**.



Daniel Lauchenauer (SECO), Ndivhuho Raphulu (NCPC) and Gerhard Fourie (the dtic) at the Eco-Industrial Parks Summit

Signed and sealed: SECO commitment to GEIPP Phase II

An undisputable highlight was achieved when the NCPC exceeded the GEIPP Phase I delivery outputs despite its end date being scheduled for June 2024. The NCPC's achievements in the programme were affirmed when SECO (funder) and UNIDO (international executing entity) confirmed the implementation of second phase of the programme.

Introducing the Eco-Industrial Parks South Africa Knowledge Hub portal

This newly launched online platform is a free, one-stop resource for EIP enthusiasts, researchers, and practitioners – providing expert insights, case studies, research papers, and networking opportunities.



Explore the site





In the Energy Programme, the NCPC saw new and promising developments in its energy projects and services.

Assessments and implementation support continues through energy systems optimisation and energy management systems aligned to ISOS 50001, but the NCPC team also supported the installation of solar PV systems in 17 SMMEs in a project with Gauteng government, and conducted its first Energy Performance Certification technical support at Future Nation School. The NCPC supported the school to achieve certifications for buildings at their two campuses in Gauteng.

A particularly encouraging assessment was undertaken at Barberton Mine that identified potential savings of 15 GWh of electricity with a total cost savings of R19 Million. Measurement and verification at three Coega sites recorded actual resource savings totalling over R6.8 million.

An EnMS Implementation for Hulamin was completed with energy savings of R3 350 738 per annum, 10 999 GJ/annum and GHG Emission Reduction of 1202 tCO₂e.



Hulamin Pietermaritzburg Plant

NEW PROJECT:

Sustainable energy systems for urban-industrial development in South Africa



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION
Progress by innovation

In October 2023, the NCPC and UNIDO launched a new energy flagship project, the Sustainable energy systems for urban-industrial development in South Africa (SESID). The project will also escalate the work of the NCPC in industrial parks (IPs).

The project is aimed at reducing GHG emissions and accelerating the decarbonization of SEZs and IPs by providing support to IP managements, tenants, municipalities and other core stakeholders at the six pilot SEZs/IPs in addressing both energy supply and demand. SESID will also enable government and local authorities to ensure a conducive IP-associated policy and regulatory environment, especially regarding sustainable energy generation and consumption.

Six industrial parks and SEZs are selected for the first phase of the project: Ekandustria (Gauteng), Phuthaditjhaba Industrial Park (FreeState), Umbogintwini Industrial Complex (KZN), East London IDZ and Coega SEZ (Eastern Cape, and Atlantis SEZ (Western Cape).



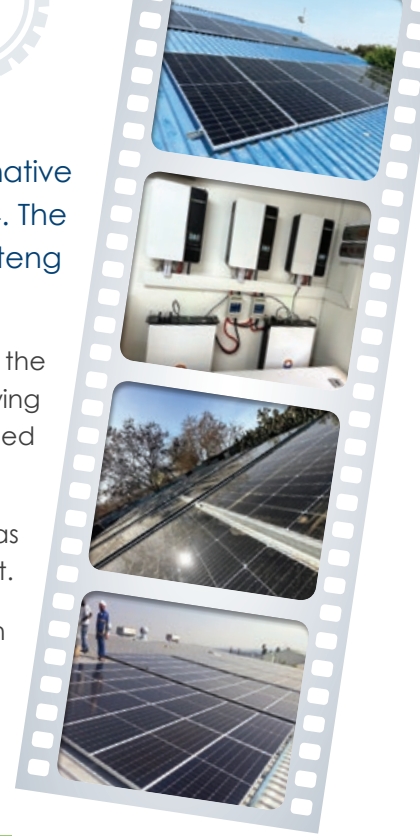
Gauteng Green Support Incentive Project

The NCPC assisted the Gauteng provincial government to implement alternative energy solutions to 17 SMMEs in the province between 2022 and March 2024. The Green Incentive Support Programme was funded and initiated by the Gauteng Department of Economic Development (GDED).

The NCPC undertook assessments at the companies in 2022/23 and made use of the identified recommendations to implement energy improvements during 2023/24. Following these interventions, the NCPC made use of three energy services companies who installed solar PV systems funded by GDED.

In collaboration with GDED, the NCPC identified 17 vulnerable SMMEs in sectors such as recycling, bed and breakfast, and manufacturing through a call for expressions of interest.

Between them, the 17 SMMEs were provided with approximately 385 kWp generation capacity, with systems including solar panels, three-phase inverters and lithium batteries. The CSIR Energy Centre will be conducting follow-up inspections at the sites during 2024 to ensure the systems are adding value, but preliminary results show that the companies are already benefitting from decreased electricity costs and a buffer against loadshedding.



CASE STUDY: R6.8 million in energy savings at Coega SEZ

During a follow up on an EnMS at the Coega Development Corporation (CDC) special economic zone in the Eastern Cape, the NCPC energy team verified energy savings of 4 149 MWh achieved since April 2021 by the CDC.

The CDC achieved these savings through the implementation of an energy management system across five of its sites, through the support of the NCPC's industrial energy efficiency project.

The CDC decided to implement an ISO50001 aligned energy management system (EnMS) and in early 2021, joined the NCPC's IEE Project. Following EnMS training, the CDC implemented an EnMS at five of its facilities: Head Office, Business Process Outsourcing (BPO), Human Capital Solutions (HCS), Multi-User Facility (MUF) and the Nelson Mandela Bay Logistics Park (NMBLP) in Uitenhage.

In 2023/24, the NCPC undertook a measurement and verification (M&V) process at three of the CDC sites (HO, BPO and NMBLP) to compare energy consumption against the baseline of 2021. To date CDC has recorded actual energy savings of 4 148 688 kWh of electricity across 17 projects, equating to a total financial savings amounting to R6.8 million and GHG emission reduction of 4 403 tCO₂e.

Of the five sites, the most significant energy savings occurred at the BOP facility in Port Elizabeth, which achieved a reduction 3 698 456 kWh. This site, covering a total area of 48 816 square meters with an operational area of 14 660 square meters, primarily serves clients such as Discovery Health's call and customer care centre.

Projects that yielded a high return included the installation of a 1MWp rooftop solar system which has resulted in alternative energy saving of 1,916,552 kWh, marking a 49% decrease from its baseline energy consumption.

The savings recorded are summarised in the table below:

Site name	Savings
CDC Head Office	Energy savings: 371 440 kWh Cost saving: R 557 160 GHG reduction: 397 tCO₂e
CDC Business Process Outsourcing	Energy savings: 3 698 456 kWh Cost saving: R 6 102 452 GHG reduction: 3 909.3 tCO₂e
CDC Nelson Mandela Bay Logistic Park	Energy savings: 78 792 kWh Cost saving: R 118 187 GHG reduction: 96.4 tCO₂e

Other non-energy benefits such as improved safety, reduced costs, and energy team skills development were also realised. One significant impact is the 12B tax benefit, which offers rapid depreciation for renewable energy projects and could result in a tax credit of over R3 million if CDC proceeds with a Solar PV roof installation. Additionally, the 12L tax incentive for sizable energy efficiency projects can provide further financial benefits, supporting larger initiatives and encouraging early communication with the treasury department for potential applications.



Circularity and Efficiency Savings

Energy



6 550 MWh
energy saved



R 5.5 billion
financial savings



6.4 million tonnes
CO₂e mitigated

Industrial Symbiosis



250 synergies
(resource exchanges)
resulting in:



525 000 tonnes
of waste diverted from landfill



1.7 million tonnes
CO₂e GHG emissions savings



R 129.5 million
Landfill cost avoidance

Water



2 million kilolitres
water saved

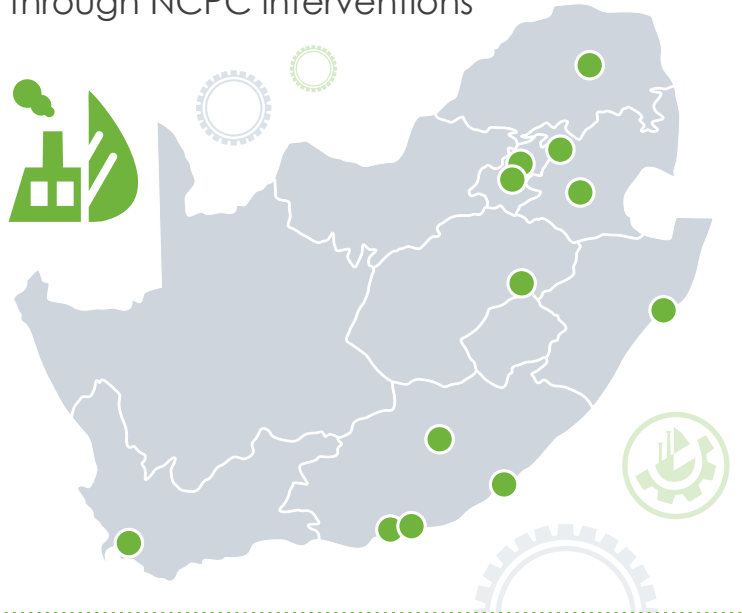


R 36.9 million
monetary savings

8.2 million tonnes
CO₂e GHG emissions
mitigated since 2011

CO₂e

12 Industrial parks supported
through NCPC interventions



*If working apart we're a force powerful enough
to destabilise our planet, surely working together
we are powerful enough to save it.*

– Sir David Attenborough, COP26, Glasgow 2021

Training and Skills Development

Skills Development Impact (2011 – 2024)



10-year Potential

RECP Assessments to Identify Potential Savings 2015 – 2024



1 042 the number of sites that received energy, water, materials and waste assessments



R2 403 million the total annual value of potential savings identified

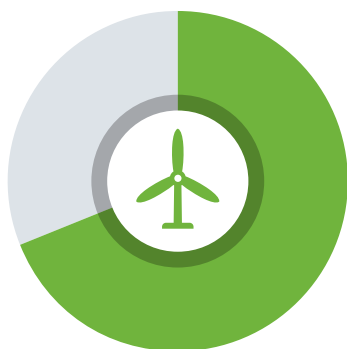


Average **R2.3 million** per company per year

R 43 275 000

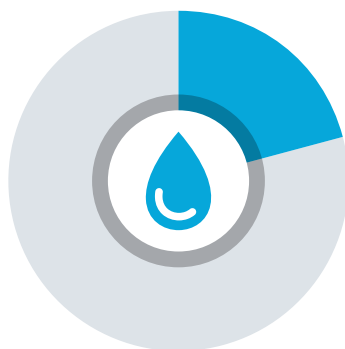
the savings "Company A" (a chemicals plant assessed in 2014) could have saved since 2015 by implementing recommended RECP improvements.

With even **50% implementation**, the 1 042 companies assessed since 2015 could be saving **R 1 817 million** in 2025 = R 1.75 million per facility.



69%

potential savings through energy improvements



21%

potential savings through water management





The RECP and Water Programme has made good progress, with 16 company interventions undertaken over the past year. These interventions included energy and water assessments, technical assistance, and the development of best practice guidelines.

The NCPC assessments also facilitated the installation of water meters at Inyoni Estate Crocodile Farm in the Magaliesberg mountain range. This initiative is helping the facility better understand and optimise its on-site water consumption and usage.

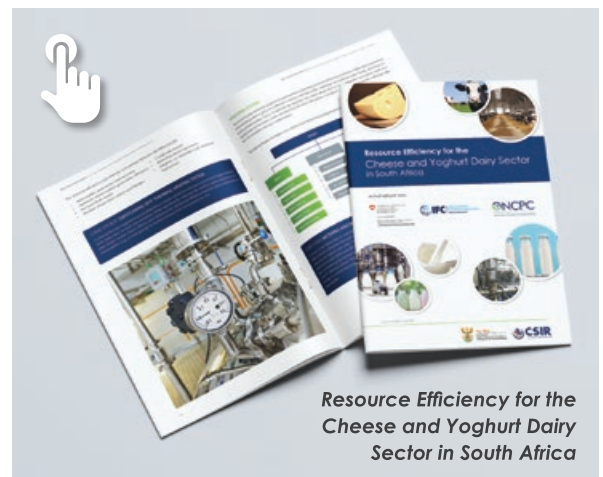
Through the Gauteng Department of Agriculture and Rural Development (GDARD) RECP Implementation Support Fund, significant funding has been provided for RECP implementation at Prevail Engineering and SARCO.

As a result, two energy efficiency projects at Prevail Engineering realised 53 941 kWh energy savings valued at R122 864 annually. SARCO reduced its energy consumption of 413 987 kWh, translating into annual savings of R356 443.

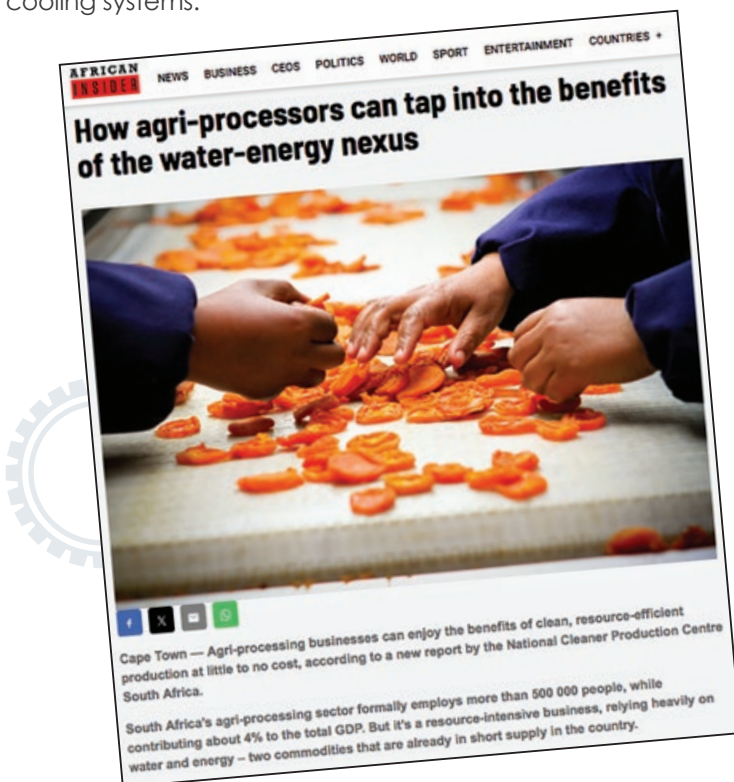
Resource efficiency tool for the dairy sector could assist water-intensive industries

The NCPC, SECO and IFC published the **Resource Efficiency for the Cheese and Yoghurt Dairy Sector in South Africa**. The tool was compiled after the NCPC undertook a dairy benchmarking study to identify practical measures that can be adopted to improve water and energy consumption and management.

Dairy processing is a cleaning-intensive industry, with more than 60% of the water used for cleaning and sanitation purposes. Without effective cleaning methods, pathogens can compromise dairy products and cause serious illnesses. The industry's energy reliance stems from driving steam boilers and operating heat and cooling systems.



Resource Efficiency for the Cheese and Yoghurt Dairy Sector in South Africa



The study results indicated significant potential savings for the dairy sector, including a potential reduction of 69% in potable water consumption, with an associated saving of up to R200 million annually. Additionally, 25-50% of electricity consumption could be reduced with an associated saving of up to R500 million annually. Fuel consumption could also be reduced by 30-50% and greenhouse gas emissions by 50% (assuming a 50% uptake in switching fuels), resulting in a possible saving of up to R180 million annually.



The study summary and tool can be downloaded free of charge from www.ncpc.co.za



The Industrial Symbiosis Programme (ISP) facilitated 33 synergies that resulted in diversion and repurposing of 5 900 tonnes of waste to resource during the financial year. The partnership and collaborations in various provinces are underway and co-funding contracts were secured in two provinces, namely Limpopo and Gauteng.

This year also marked the extension of the programme's footprint to the North-West Province, achieving full implementation of ISP across all provinces in the country.

In Gauteng, the Gauteng ISP successfully facilitated synergies that diverted 1 019 tonnes of resources from landfill, resulting in 2 137 tonnes of GHG emissions savings (CO₂e).

ISP in Limpopo is proving a successful partnership project between the Limpopo Department of Economic Development, Environment and Tourism (LEDET). From 2019 to date, Limpopo ISP has completed 50 synergies, 54 831 tonnes of waste diverted from landfill, 234 454, 7 tonnes CO₂ emissions reduction, 45 permanent jobs created, and 22 temporary jobs created.

Meanwhile, in Mpumalanga, the programme facilitated eight synergies, produced a technical assistance report for recycled plastic bricks, and conducted three waste management assessments. Notably, a synergy involving the exchange of wooden stems for use in charcoal briquette manufacturing diverted 270 tonnes of waste into input material.



Industries in the North West Province now have access to a more sustainable waste disposal option, which promises to provide small companies with business opportunities stemming from these waste streams. This is as the province witnessed the launch the Industrial Symbiosis (IS) programme on Wednesday, 28 February 2024.

CASE STUDY:

Limpopo Industrial Symbiosis Programme empowers community cooperative with waste recycling skills

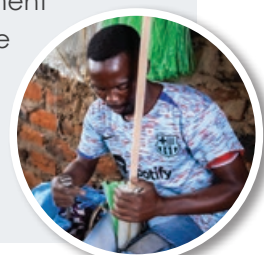


The Industrial Symbiosis Programme (ISP) team facilitated a significant impact by supporting Dziphathu Green Tech in empowering a local community cooperative in Limpopo with waste recycling skills.

A former participant of the ISP, Dziphathu Green Tech leveraged the knowledge gained from the programme by training the NakisaniVhupho Development Primary Cooperative on waste plastic processing.

The company commissioned a plastic waste processing machine for the cooperative, enabling them to wash, cut, and process plastic bottles into brooms. This initiative has diverted 84 tonnes of waste from landfills, reduced CO₂e emissions by 859 tonnes, generated R105 000 in income, and created employment for the 28 cooperative members. Proceeds from sales have been invested in acquiring formal operating premises for the business.

This cooperative, established in 2021 by Vuwani Vyeboom village members, aims to alleviate poverty by promoting economic empowerment through sustainable waste management practices. They collect plastic bottle waste to manufacture plastic brooms, selling the finished products to local communities and at environmental trade shows.





Circularity in the disposal of confiscated clothing, textiles, footwear and leather goods

The NCPC processed more than 1.8 million kilograms (1 811 tonnes) of confiscated clothing, textile, footwear and leather goods using circular economy methodologies between September 2022 and March 2024.

The project, aimed at managing the disposal of confiscated clothing, textile, footwear and leather goods in a sustainable and environmentally compliant manner, was implemented in collaboration with the Intergovernmental Agency Working Group on Illicit Trade.

Stringent legal guidelines govern the handling and disposal of illegal and counterfeit items confiscated by the South African Revenue Services (SARS). Typically, items are stored in SARS warehouses and eventually incinerated. Not only does this result in harmful environmental side-effects, but valuable input materials for other processes are destroyed.

This pilot project created a working model for a circularity approach through the processing of clothing, textile footwear and leather goods at ISCOR State Warehouse in Pretoria and Kaserne State Warehouse in City Deep, Johannesburg.

A total of 1 748 961 kgs of clothing and textiles and 61 859 kgs of footwear and leather goods stored at the two state warehouses were destroyed by means of upcycling or recycling the materials. The NCPC appointed local SMMEs to perform the work required, providing an opportunity for upskilling and upgrading of equipment in the appointed service providers.

Destroyed clothing and textile waste that were usable and with the potential to be diverted from landfill were sold to end users who import textile waste as an input raw material.

About 35% of the destroyed clothing and textiles went to a KwaZulu Natal textile recycling company, who convert textile waste into insulation, bedding, and motor industry door panels. Another 23% of the waste went into making wiping cloths by a manufacturer in Germiston.

In addition, temporary jobs were created. Another ten (10) people were employed at the ISCOR SWH and another 11 at the Kaserne SWH over the period of destruction in 2023.



InTex Roadshows

In July 2023, the Innovative Business Practices and Economic Models in the Textile Value Chain (InTex) Project implementing partners, the NCPC and CARES, hosted roadshows across two provinces to facilitate a dialogue between the project steering committee including the Department of Science and Innovation, Department of Forestry, Fisheries and Environment, provincial and local government as well as government stakeholders and participating small and medium enterprises (SMEs). The roadshows resulted in numerous resolutions based on the challenges shared by SMEs.

Five-year multinational project launched to advance the circular economy in the textile industry

The multi-national GEF-funded project, **Promotion of the circular economy in the textile and garment sector through the sustainable management of chemicals and waste**, was launched in South Africa in November 2023 at an inception workshop with a broad range of sector stakeholders.

The five-year project is being implemented nationally by the NCPC, in partnership with the United Nations Industrial Development Organization (UNIDO) and aims to advance the concepts and advantages of circular economy in the South African textile and garment sector. Its application promises great benefits for companies, the sector, and the country. Other countries participating are Lesotho, Madagascar and Ethiopia.

The project will follow a value chain approach that, upstream, addresses the sector's resource use, green and sustainable chemistry, and downstream, addresses the reuse, recycling and conversion of textile or garment discards and related wastes into economically viable and socially beneficial products and services.

Purpose of the project

There are a lot of hazardous chemicals in the value chain, including chemicals of concern and persistent organic pollutants. This presents an obstacle to recycling throughout the value chain because you cannot recycle these materials when they contain hazardous chemicals.

The project was some time in the making as the Preparation Phase took place in 2021 and involved eight clothing and textile companies in KwaZulu-Natal, the Western Cape and the Eastern Cape. This period served to gather information from resource efficiency and cleaner production, best available technologies, and break-even point assessments; studies on gender; waste categorisations; and chemicals used, among others.



More information about the project and its progress will be made available on the project page at <https://www.industrialefficiency.co.za/clothingandtextile/>.



UNEP, funder of the InTex Project, on a site visit to participating company, Green Thread Studio, the design and production wing of the Cape Union Mart Group in Cape Town.



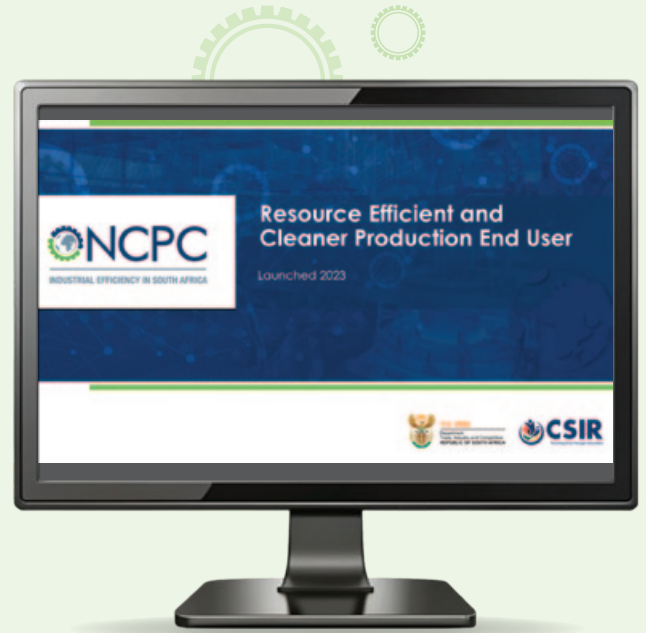
Growing Green Skills

The NCPC skills development activities are driven by a strong focus on sharing knowledge and building working relationships with knowledge partners in the circular and green economy.

During 2023, the NCPC participated in the review for the seven qualifications built on the NCPC / IEE training with EWSETA and subject matter expert representatives.

One of the highlights of the year was the roll-out of the new RECP expert level training. The new RECP expert is now a programme, rather than just one course, and consist of seven specialist modules, which work together to allow experts in RECP, water, energy, materials and waste and carbon. As a result, the NCPC trained 58 trainers during the year.

New training material was developed in five new courses including Bulk Water Services and Industrial Water Optimisation end-user training, Process Heating end-user training, Sustainable Finance Training and a Renewable Energy module aimed at supporting the transition of Industrial Parks towards an Eco-Industrial Park model.



Industry adaptation project a first for NCPC

The Strengthened Adaptation Capacity for a Green & Resilient Economy in South Africa (SAIA) was successfully launched in six companies.

The industry adaptation project funded by the Government of Flanders overarching objective is to accelerate the transition to a green economy, a decarbonized industry, and a vibrant and inclusive job market in South Africa.

The project kicked off with a call for proposals issued by UNIDO for applications by companies, project developers, technology, and service providers for support for energy-water nexus projects in South Africa. From the 10 proposals received by UNIDO, six were selected to receive support and a due diligence site visit was undertaken to establish the level of readiness of each project/company and to identify if technical assistance would be required.

The due-diligence assessment reports were successfully completed and shared with UNIDO, with recommendation for either co-financing or technical assistance for further project development. Of the six companies, four companies have received the grant to date, whilst two rest will be given technical support by the NCPC for further development of proposed projects.

The companies participating in SAIA that received approval for funding are Thiele Holdings, Afrimatt Hemp, EZPack Water Ltd and Reyneke Wines, whilst Geoterrimage and Isle Utilities will receive technical support.



Representatives of the government of Flanders, UNIDO, NCPC, TIA and the dtic, partners of the SAIA Project.

Bridging the gap: Sustainable Finance Programme

The NCPC has seen for many years that access to finance can be a barrier to the implementation of RECP interventions. Meanwhile, multiple funding sources are available to projects that will address green economy principles. The gap often lies in the articulation of bankable business cases to support finance applications.

Programme Highlights



The NCPC hosted the first Sustainable Finance workshop based on the newly developed training material and database of green finance opportunities in South Africa in March 2024. The new material is more than a theoretical training course, and participants are given practical support to acquire sustainable finance for projects they may have or will identify.

The workshop also provides access to the NCPC database of sustainability project financiers and templates facilitating the creation of compliant and professional submissions increasing the prospects of positive outcomes.

In the 2023/24 period, the NCPC facilitated ten financial linkages between companies and potential funders.

 The financial guidelines can be found at <https://www.industrialefficiency.co.za/guides-and-reports/>

2023/24 at a glance

-  **93** companies supported through plant-level intervention
-  **10** financial linkages
-  **22** RECP assessments
-  **5** new training courses developed or updated
-  **60** new trainers
-  **33** workshops and events
-  **32** publications, media or thought leadership articles

 **R 425 128 005** per annum total potential savings identified

 **5 900 t** of waste diverted through **33** ISP synergies

Repurposing of 18 000 tonnes of confiscated SARS CTFL goods through upcycling and recycling



INDUSTRIAL EFFICIENCY IN SOUTH AFRICA

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