



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



The potential of Industrial Parks to help address South Africa's energy crisis

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INTRODUCTION

South Africa is frequently experiences rolling blackouts, which are brought on by breakdowns in the power plants which result in unplanned outages that reduce the amount of electricity available on the grid.

PROBLEM

IMPACT

The country's economy has been significantly impacted by load shedding, with many firms finding it difficult to operate during power outages and suffering financial losses.

According to the South Africa government and Eskom in order to solve the load shedding problem more power plants and generators will have to be constructed.

SOLUTION



What is an Industrial Park?

The term "industrial park" refers to a variety of locations, including industrial areas, Special Economic Zones, Industrial Development Zones, industrial investment regions, and industrial corridors.

They exist to support industrial operations and related commercial, infrastructure, and service activities.





Overview of industrial parks projects in South Africa

The Industrial Park Revitalization Programme (IPRP) currently to address 30 parks by firstly renovating or upgrading infrastructure and security features, and secondly improving operating conditions and supporting investment promotion and branding of parks.

Industrial Parks
Revitalization
Programme

GEIPP demonstrates the viability and benefits of greening industrial parks by improving resource productivity and economic, environmental, and social performance of businesses and thereby contributing to inclusive and sustainable industrial development in the participating developing and transition economies.

Global Eco-Industrial
Parks Programme

The CSP supports metros directly and works across divisions in National Treasury, with other national Departments and broader stakeholders to enhance the enabling policy environment fiscal frameworks to make it easier for cities to work more efficiently.

Cities Support
Programme



Common barriers and challenges hindering the further development of industrial parks in South Africa

- **Insufficient integration and coordination of sustainable energy strategies, policies and regulation for IPs at national, provincial and municipal levels.**
- **Industrial parks do not consider sustainable energy and/or integrated energy solutions due to insufficient evidence-based experience.**
- **Lack of financial and investment environment to enable and promote investments in integrated sustainable energy interventions in IPs**



Sustainable energy systems for urban-industrial development in South Africa

Overall Objective

Overall Objective: Reducing GHG emissions and other environmental and social impacts by accelerating the decarbonization of industrial parks addressing both the energy supply and demand side



Key Components

Component 1: **Fostering the coordination towards sustainable energy transformation of IPs by creating a conducive enabling environment under consideration of social equity.**

Component 2: **Demonstration of low-carbon and sustainable energy interventions in target IPs**

Component 3 : **De-risking scheme for upscaling and replication of sustainable energy solutions in IPs**

Cross-cutting themes: Gender mainstreaming / Agenda 2030 and the SDGs

Project set up and Partnerships

The project is implemented by UNIDO, in collaboration with NCPC-SA

Focus: decarbonization of industrial parks addressing both the energy supply and demand side.

Main counterpart: the dtic

Execution partner: NCPC-SA



Budget: 1,2 Million USD

Funder: Global Environment Facility (GEF)





Project Outcomes

- Through the project interventions the Government and local authorities will be enabled to ensure an aligned and coordinated IP associated policy and regulatory environment, especially with regard to energy generation and consumption (long-term outcome). Municipalities, IPs and industrial establishments will have sufficient information for individual strategies and investment decisions.
- Low-carbon and sustainable energy demonstration projects for dissemination of experiences will allow IP managements and manufacturing businesses to gain confidence and sufficient evidence of the technical, economic, social and environmental viability of sustainable energy solutions for industrial production.
- Additionally, the project preparation facility will help the Government and the financial sector to enhance the financial and investment environment to de-risk investments in sustainable energy infrastructure in IPs.



Power Sector Regulatory Assessment

- **Electricity Regulation Act (ERA)**
- National Energy Act (NEA)
- Integrated Resource Plan (IRP)
- White Paper on Renewable Energy
- Carbon Tax Act (CTA)
- Carbon Offset Regulations (COR)
- Electricity Pricing Policy (EPP)
- **NERSA Regulatory Rules on Network Charges for Third-Party Transportation of Energy**
- Transmission Grid Code (TGC)
- Distribution Grid Code (DGC)
- South African Renewable Energy Grid Code (SAREGC)
- National Regulatory Services (NRS) 097



Power Sector Regulatory Assessment (2)

Amendment to Schedule 2 of the Electricity Regulation Act

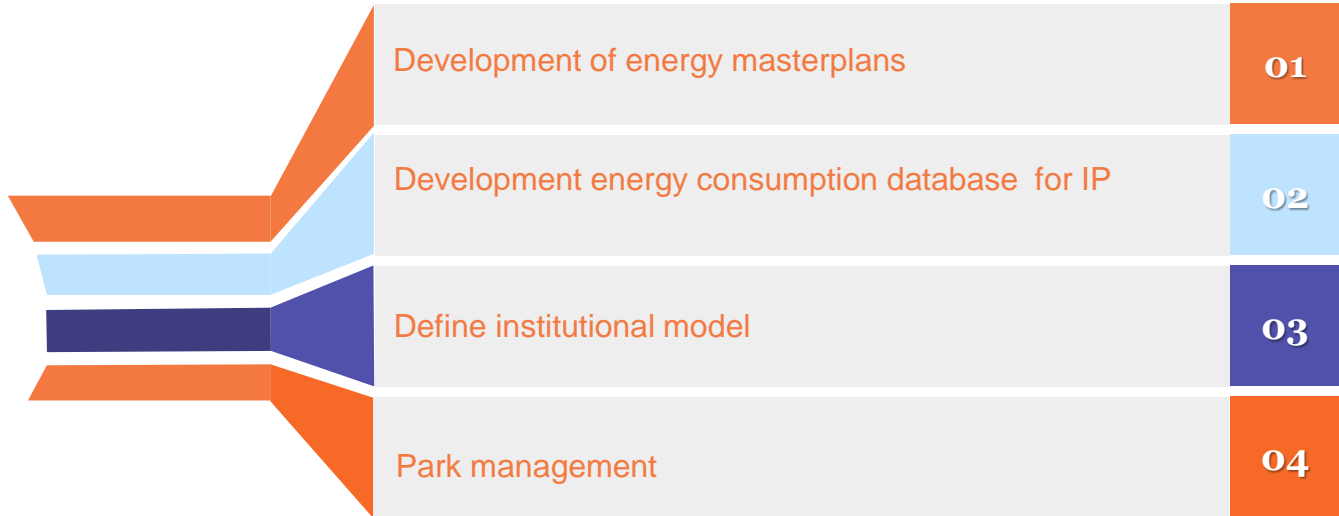
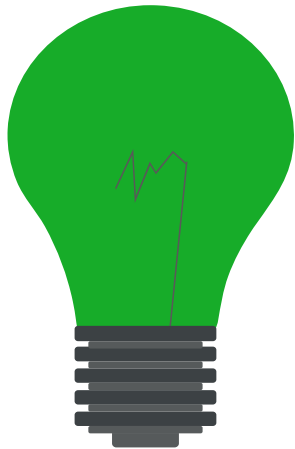
On 15 December 2022 the Department of Mineral Resources and Energy (DMRE) gazetted the latest amendments to Schedule 2 of the Electricity Regulation Act (ERA), which exempts power generation facilities from requiring approval from the National Energy Regulator of South Africa (NERSA).

Wheeling

The NERSA Regulatory Rules on Network Charges for Third-Party Transportation of Energy state “Wheeling of energy shall be allowed, subject to the generator receiving its approvals from NERSA to sell to a third party and the signing of the network service provider’s (NSP) Connection and Use-of-System Agreement”.



CONSIDERATIONS FOR SCALING UP THE IP PROJECT IN SOUTH AFRICA





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Thank you for your attention!

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