



# Economic Impact Assessment of five of Eskom's coal power stations

Camden | Grootvlei | Hendrina | Komati | Kriel

**Eskom Holdings SOC Ltd**

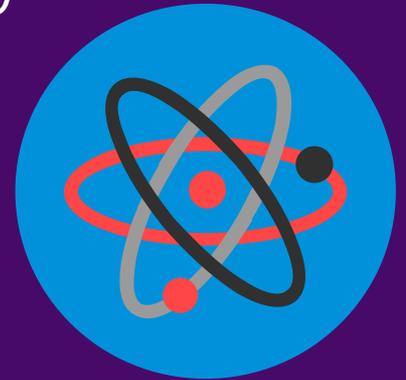
**July 2017**



# Presentation roadmap

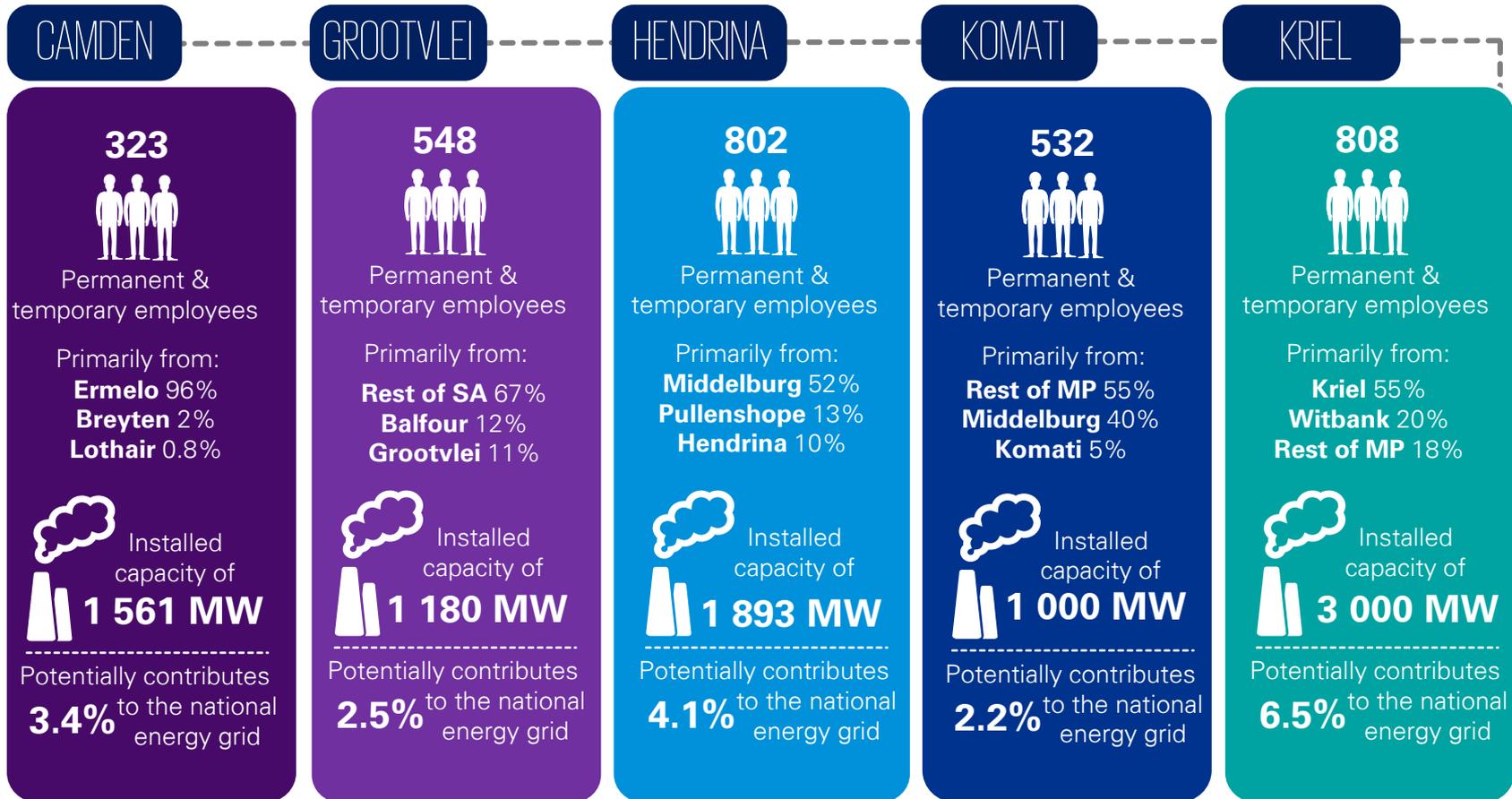


# Overview of the five Eskom power stations



# Five selected Eskom coal power stations

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Source: Eskom data

Approach to estimating  
the power stations'  
economic contributions



# Approach: Overview

1

What did we do?

We measured the broader **economic impact** of five of Eskom's power station's investment spending and operational expenditure in Mpumalanga and the rest of South Africa between 2014/15 and 2016/17

2

How did we do it?

We used the **Social Accounting Matrix (SAM) methodology** to estimate how the activities of the power stations in one or more parts of the economy, could **affect other sectors** of the economy, and how the industry investment and operational impact is distributed in the economy. It thereby highlights the **economic linkages within the economy** and has the ability to show the **direct, indirect and induced effects** of a given expenditure and/or investment

3

What data did we use?

The analysis that follows uses the **2014 SAMs** for **Mpumalanga and South Africa**, built by KPMG. We utilised the following data from a number of different sources: capital investment values and generation capacity, operational expenditure and income from Eskom, National Accounts, income and expenditure surveys, labour force surveys, GDP statistical release from SARB and StatsSA

# Approach: SAM model outputs



Contribution to economic growth through the Gross Value Added created

This included each of the five Eskom power stations' direct, indirect and induced GDP contributions to the economy



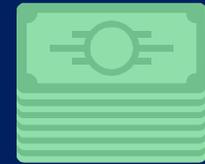
Contribution to public finance through tax revenue

Impact on public finance through the tax revenue generated due to each power station's investment and operations



Contribution to employment creation

Direct jobs associated with the power stations and indirect employment sustained through inputs purchased from suppliers



Contribution to poverty alleviation

The impact on poverty alleviation due to each power station's investment and operations

Estimated economic  
impact of the five  
Eskom power stations'  
activities



# Combined economic impact in South Africa

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## Impact on GDP



**R32.8 billion** was the average\* estimated economic activity created per year due the total capital and operational expenditure by five of Eskom's coal power stations (2014/5 - 2016/17)

*(0.8%\*\* of South African GDP)*

## Impact on government revenue

An estimated increase of **R9 billion** on average per year in government revenue



## Impact on employment



An estimated **92 961 jobs** have been sustained on average per year

*(0.6%\*\*\* of total number of jobs in South Africa)*

## Impact on households

An estimated **R21.1 billion** was the total income received by households on average per year

*(6.1% flows to low-income households)*



\* The average per year is the total impact over the period, divided by number of years

\*\* Average annual GDP of South Africa from 2014 to 2016 = R4 063 808 million (Source: South African Reserve Bank).

\*\*\* Average annual number of jobs in South Africa from 2014 to 2016 was 15 802 333 (Source: StatsSA Statistical release P0211, Quarterly Labour Force Survey (QLFS), Quarter 4, 2016).

# Estimated combined role in economic development

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## Future capital expenditure

## Day-to-day operations

GDP  
impact



Every **R1 investment** potentially adds an **additional R1.05** to the national economy



Every **R1 spend** potentially adds an **additional R1.22** to the national economy

Employment  
impact



Additional **R1 million investment** implies an additional **3 jobs sustained**



Additional **R1 million spend** implies an additional **3 jobs sustained**

Tax  
impact



Every **R1 new investment**, potentially adds **18 cents** to the **national government revenue**



Every **R1 spend** potentially adds **35 cents** to the national government revenue

Household  
impact

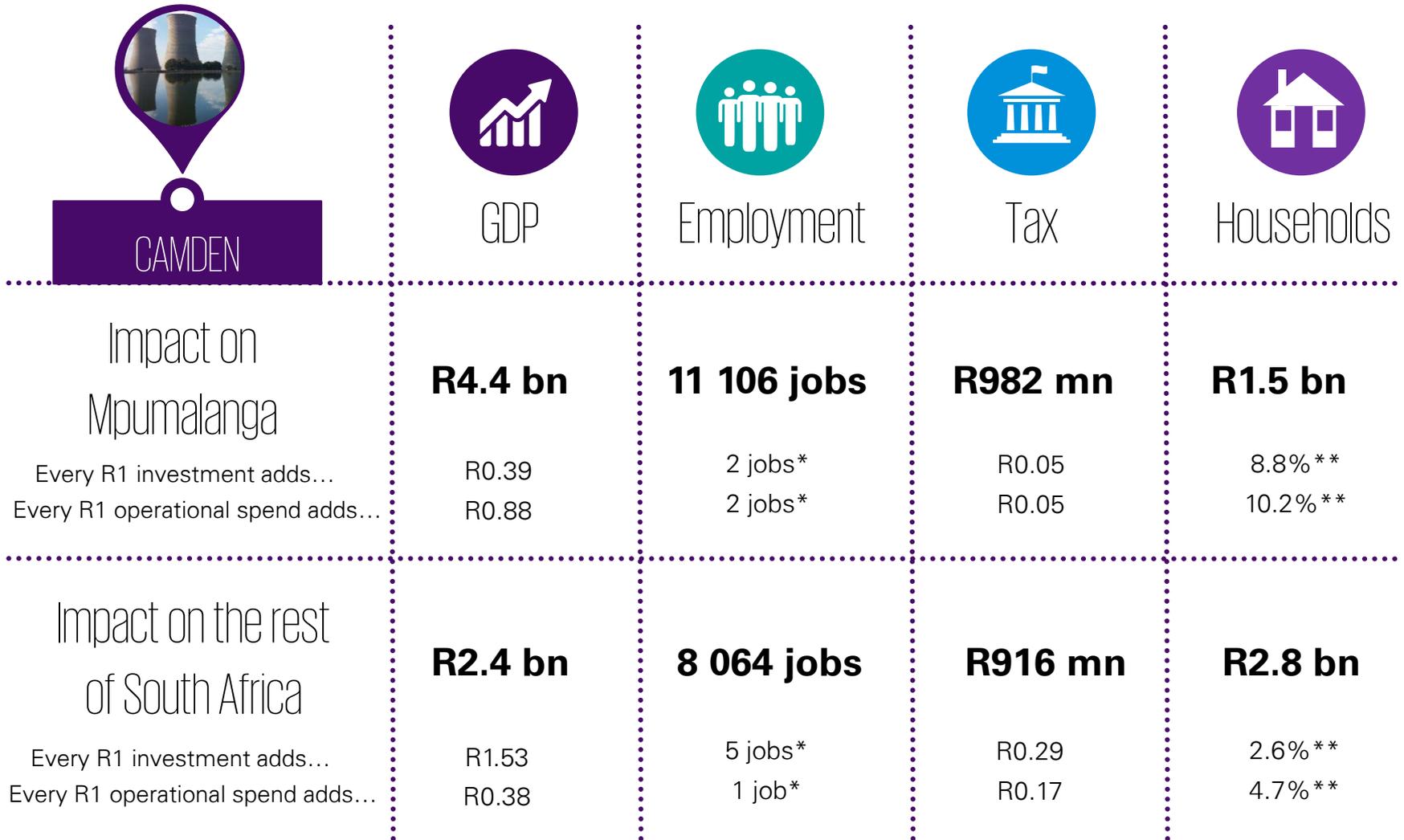


Every **R1 investment** potentially adds **43 cents** to total **household income**; out of this 43 cents, **3%** is distributed to lower income households



Every **R1 spend** potentially adds **81 cents** to total household income; out of this 81 cents, **6%** is distributed to lower income households

# Camden's economic impact and role in South Africa

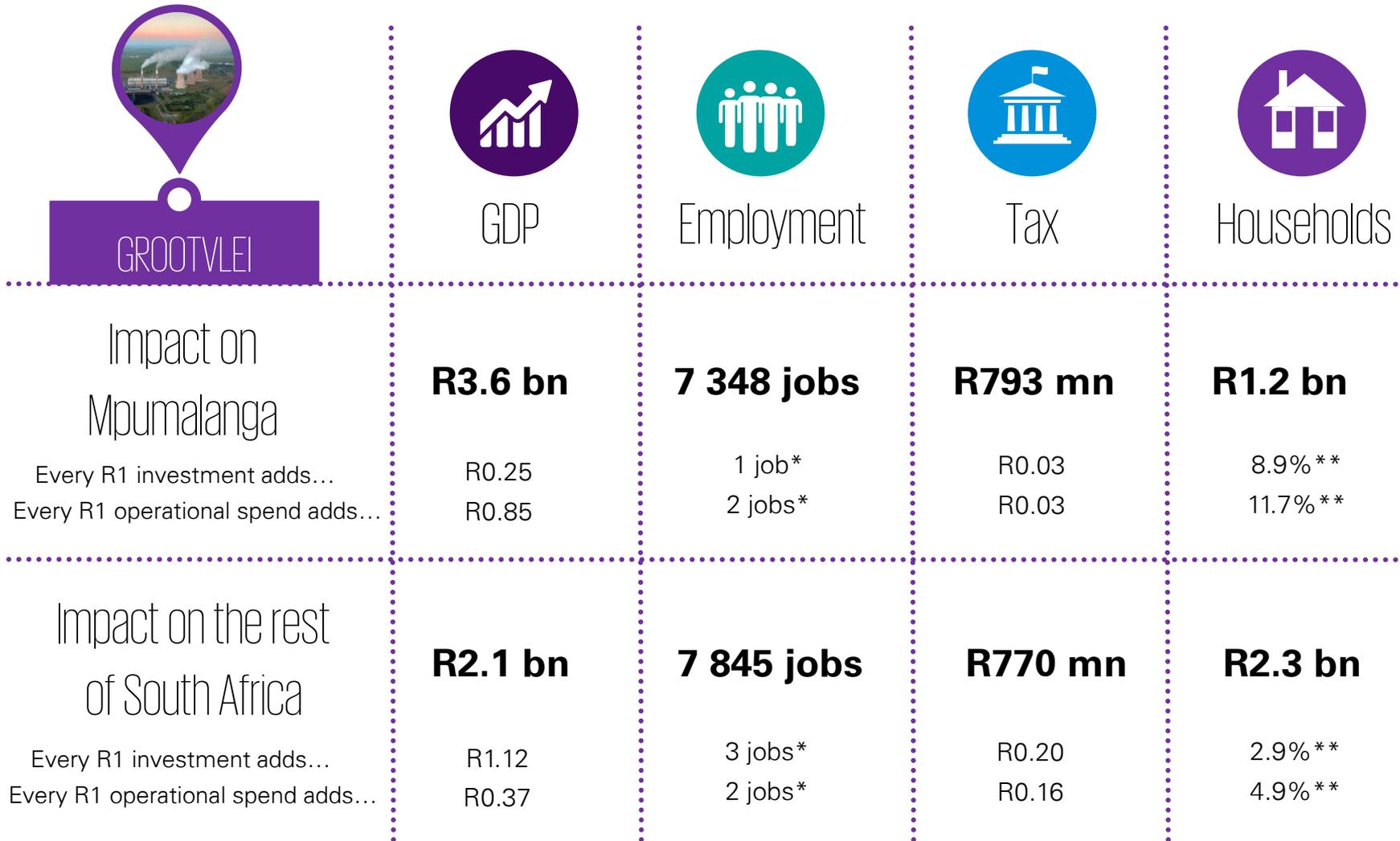


\* Every R1 million investment/operational spend adds...

\*\* ...of household income generated will flow to low-income households

Source: KPMG analysis from 2014 Social Accounting Matrix for South Africa

# Grootvlei's economic impact and role in South Africa

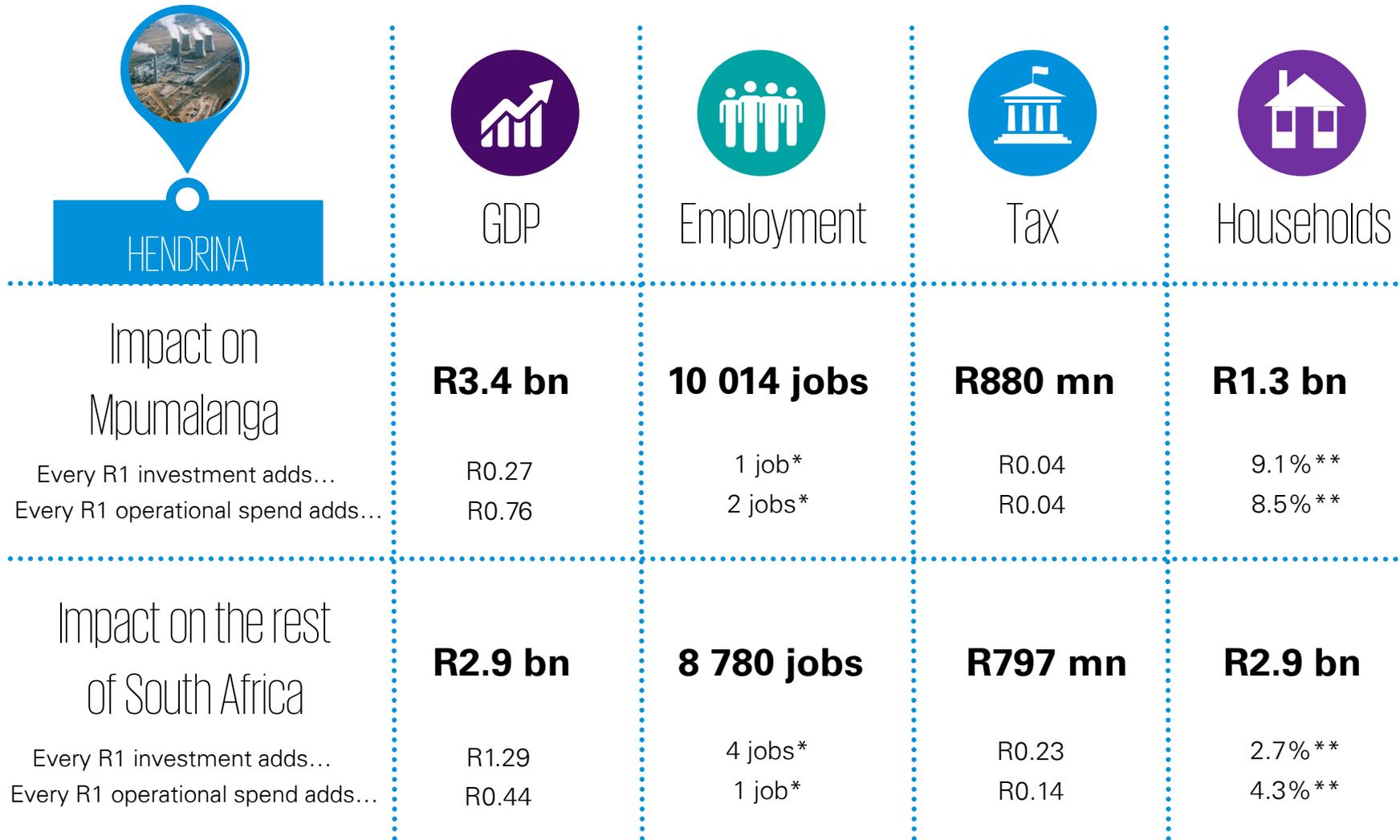


\* Every R1 million investment/operational spend adds...

\*\* ...of household income generated will flow to low-income households

Source: KPMG analysis from 2014 Social Accounting Matrix for South Africa

# Hendrina's economic impact and role in South Africa

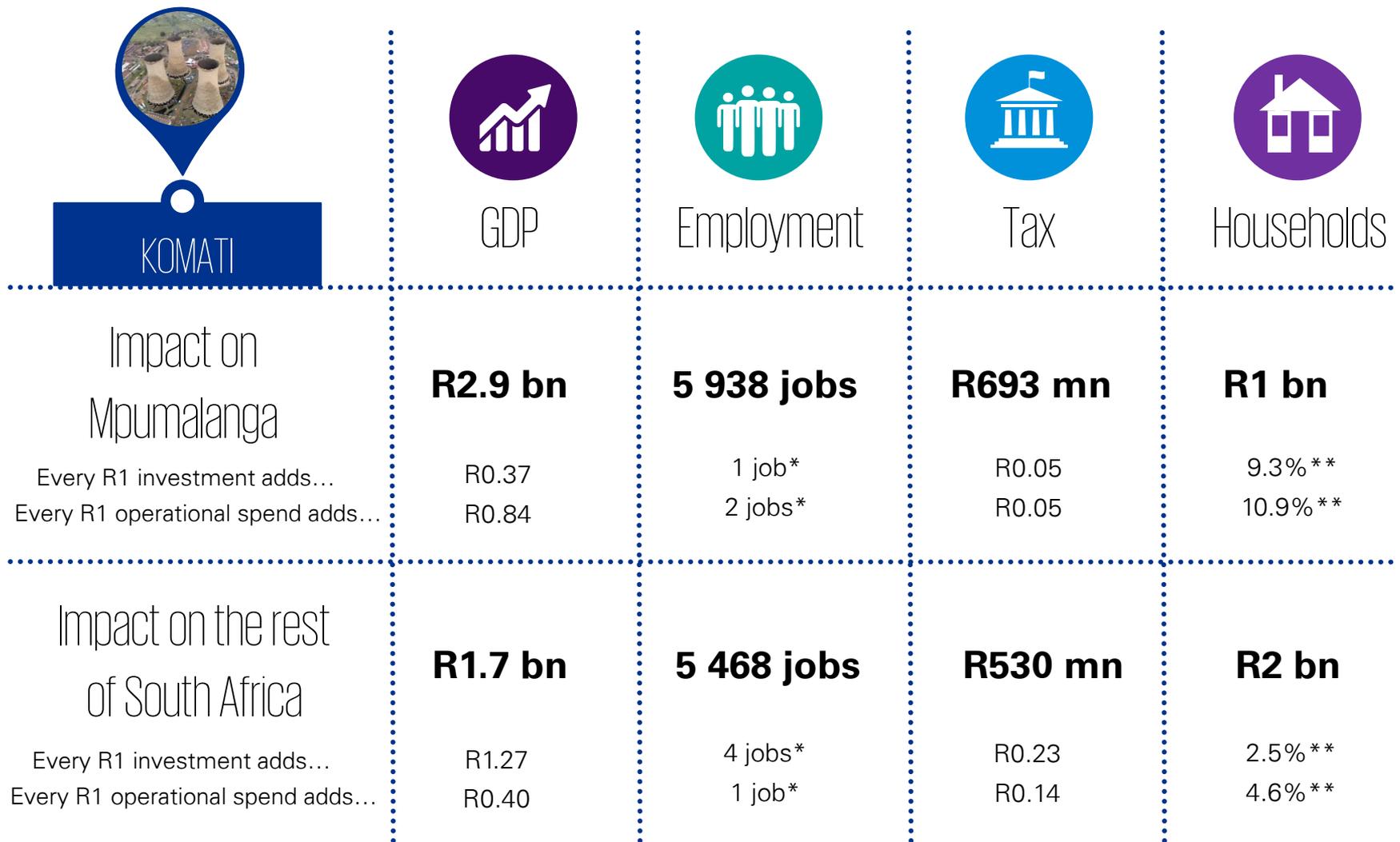


\* Every R1 million investment/operational spend adds...

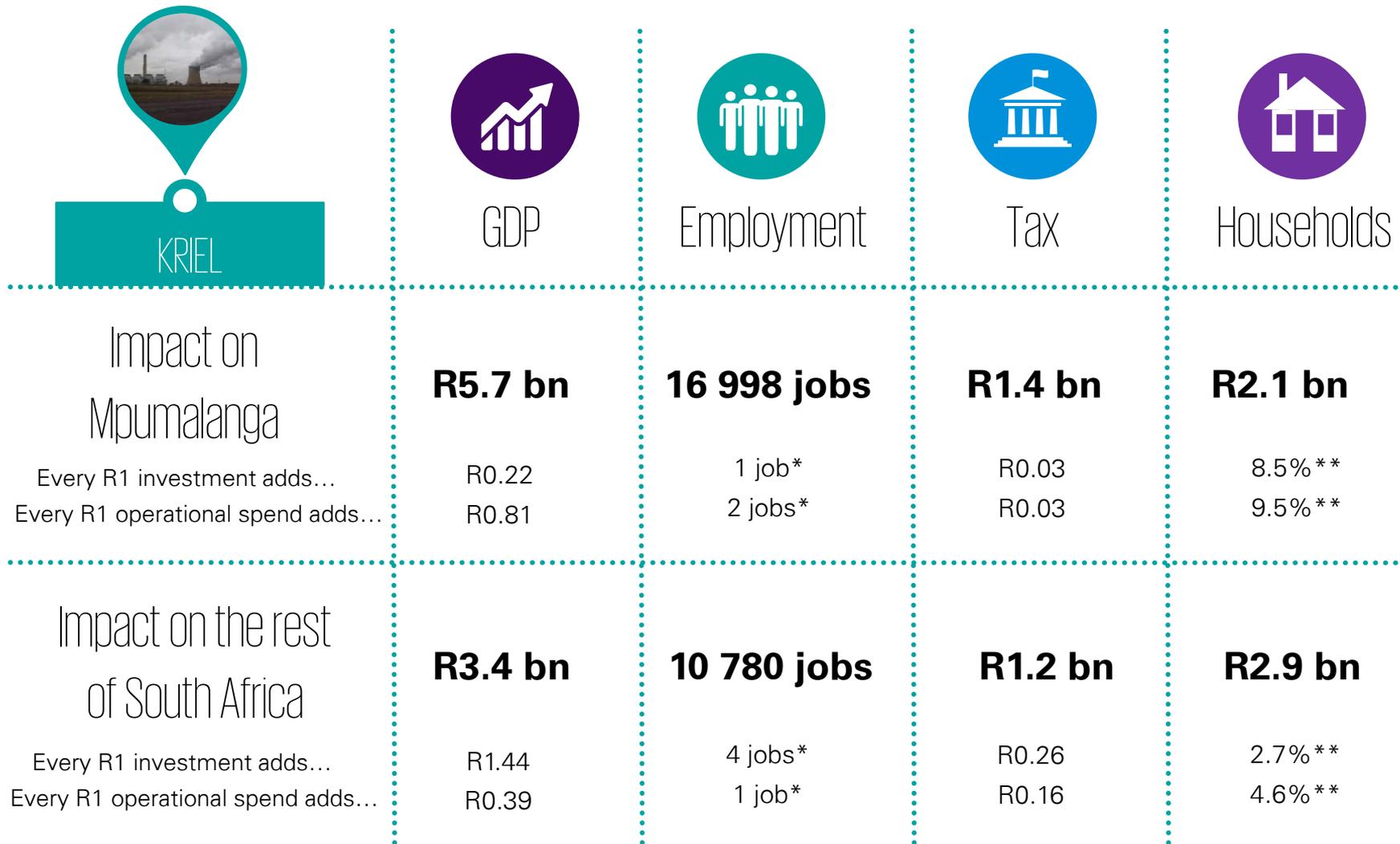
\*\* ...of household income generated will flow to low-income households

Source: KPMG analysis from 2014 Social Accounting Matrix for South Africa

# Komati's economic impact and role in South Africa



# Kriel's economic impact and role in South Africa

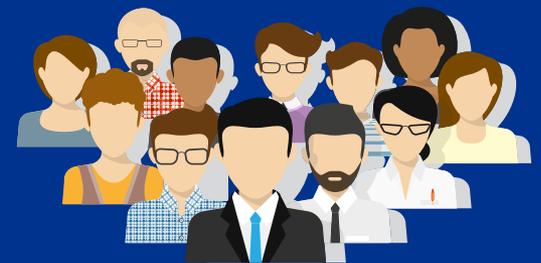


\* Every R1 **million** investment/operational spend adds...

\*\* ...of household income generated will flow to low-income households

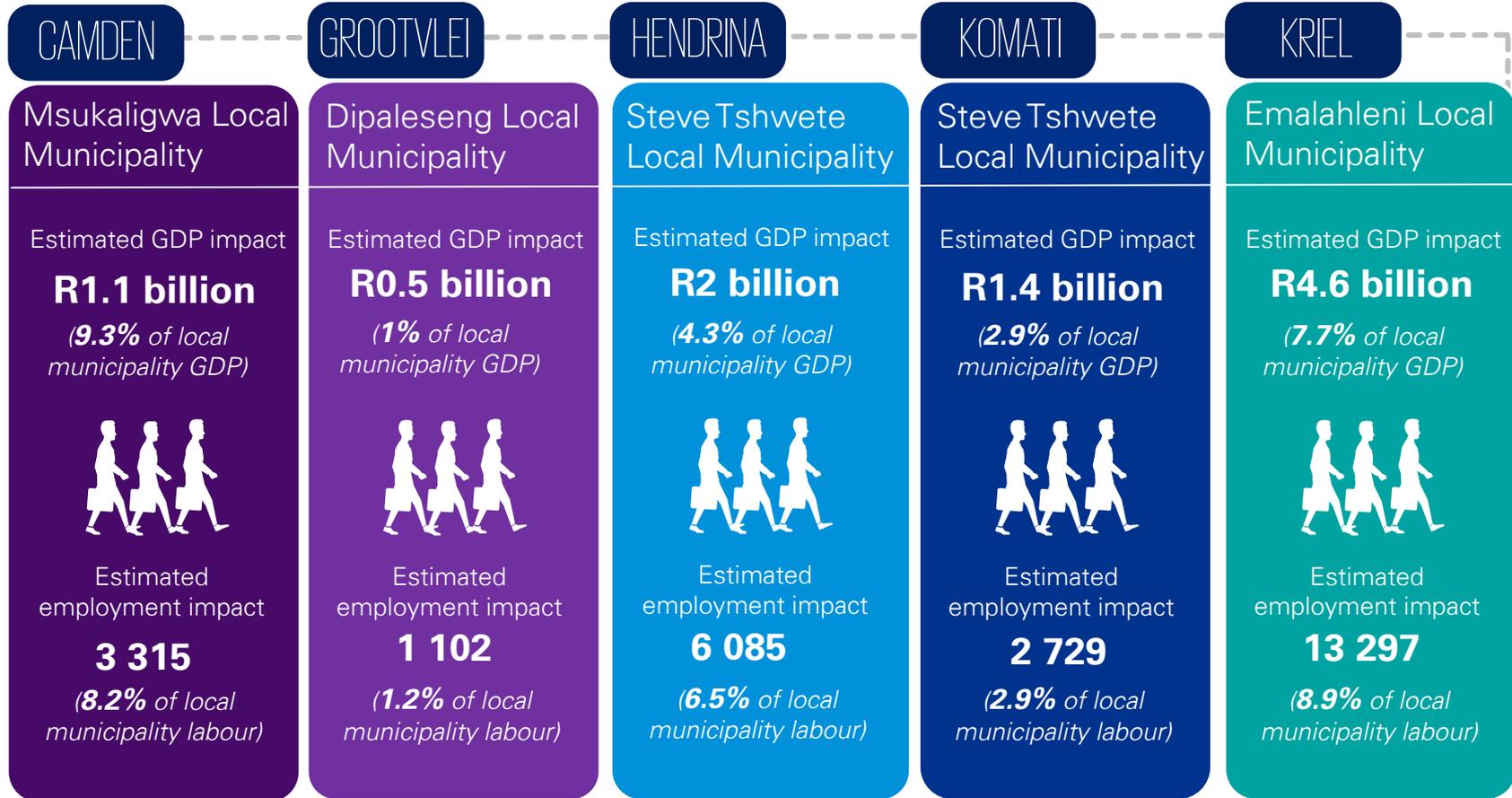
Source: KPMG analysis from 2014 Social Accounting Matrix for South Africa

# The five Eskom power station's estimated impact on local communities



# Estimated impact on local municipalities

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Source: KPMG analysis from 2014 Social Accounting Matrix for Mpumalanga

# Quality of jobs at the five Eskom power stations



# Quality of Jobs

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**WANTED**



**Top 100 occupations in high demand** in South Africa features many skills associated with the **electricity sector** that are in **short supply**

The **semi-skilled and skilled jobs** offered by Eskom comes with **above-average salaries to recruit and retain** employees with **scarce skills**



What determines job quality\*?



Earnings quality

Workers' well-being in terms of **average earnings** and **earnings inequality**



Job loss risk

**Low unemployment risk** for a worker and **benefits received** in case of unemployment



Work environment

Balance between **job demands** and **job resources**



Compared to the utilities industry\*\* in Mpumalanga, employees at the five power stations earn **more than the industry** average



\* OECD, Job Quality, nd. <http://www.oecd.org/statistics/job-quality.htm>

\*\* Utilities industry/sector includes electricity, gas and water

# Conclusion

# Way Forward

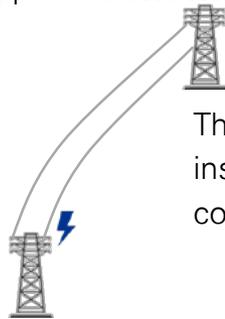
Camden | Grootvlei | Hendrina | Komati | Kriel



As South Africa looks to intensify productivity and **bolster economic growth**, the full range of **role players** need to draw on their strengths and synergies to address South Africa's changing electricity requirements



With so many **linkages in the economy** the five power station's have an important role to play in the economy through their various activities. In addition by **contributing to the country's energy needs**, the power stations also support **economic growth** in Mpumalanga and the rest of South Africa



The five power stations, with a combined installed capacity of **8 634 MW\***, potentially contributes **18.7%** to the national grid



The five power station's contribute to the local economy, Mpumalanga and the rest of South Africa through contributing to economic growth, sustaining jobs, uplifting the community and contributing to the fiscus.

# Questions



# Thank you



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