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Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# **INDUSTRIAL EMISSION MANAGEMENT**

## **Session 2.1 – The South African Industrial Emission Profile**

Presentation to the 4<sup>th</sup> Annual Air Quality  
Governance Lekgotla,  
Vanderbijlpark,  
12/13 October 2009

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Special Advisor: Industrial Process  
Engineering,  
Department of Environmental Affairs

# Presentation Overview

- APPA Registration Certificate Review Project
- National Overview
- Provincial Overview
  - Distribution by future licencing authorities
  - Complexity of sites
  - Dominant industry type
- Way Forward



# APPA Registration Certificate Review Project

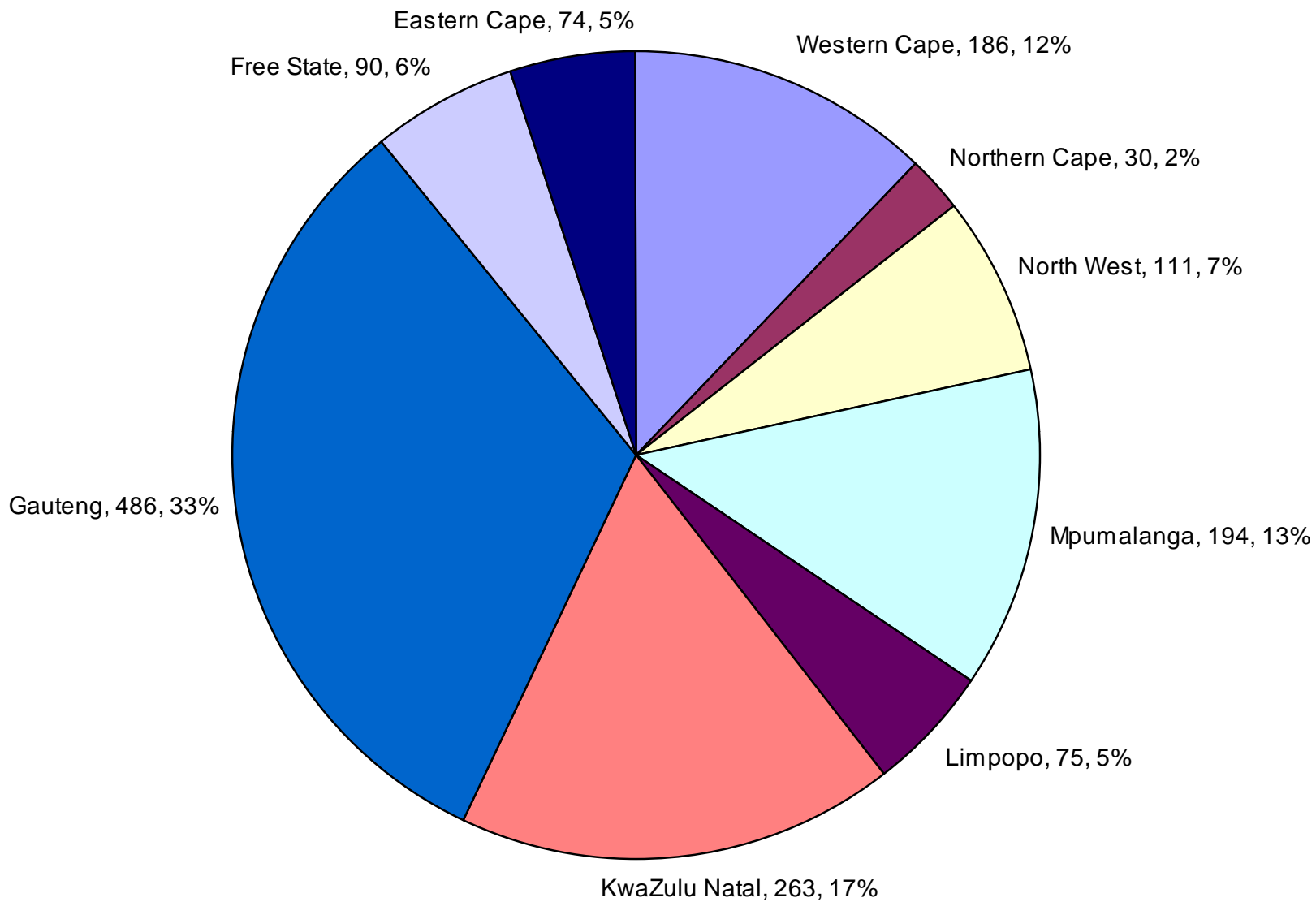
- Consolidation of hard copy database
- Development of an electronic database
- Prioritisation process
- Registration certificate review and amendment process
- Licence fee calculator development
- Capacity development



# National Overview

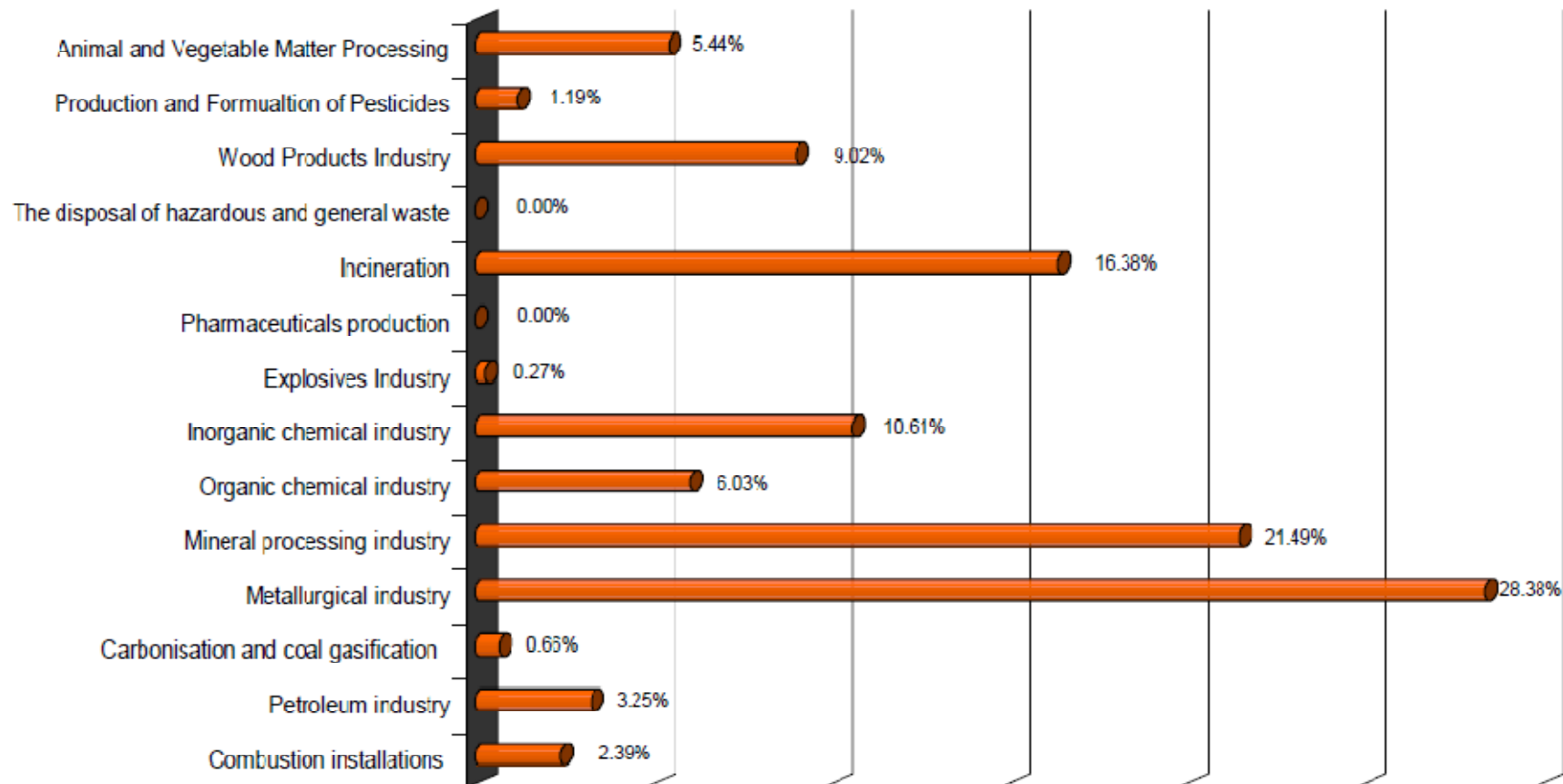
- 2578 registered companies captured into the hard-copy and electronic databases
  - 4253 individual registration certificates
- 1509 operational facilities – actual number expected to be smaller
  - 2135 individual registration certificates
- Final RC vs Provisional RC ratio
  - 22% provisional
  - 78% final





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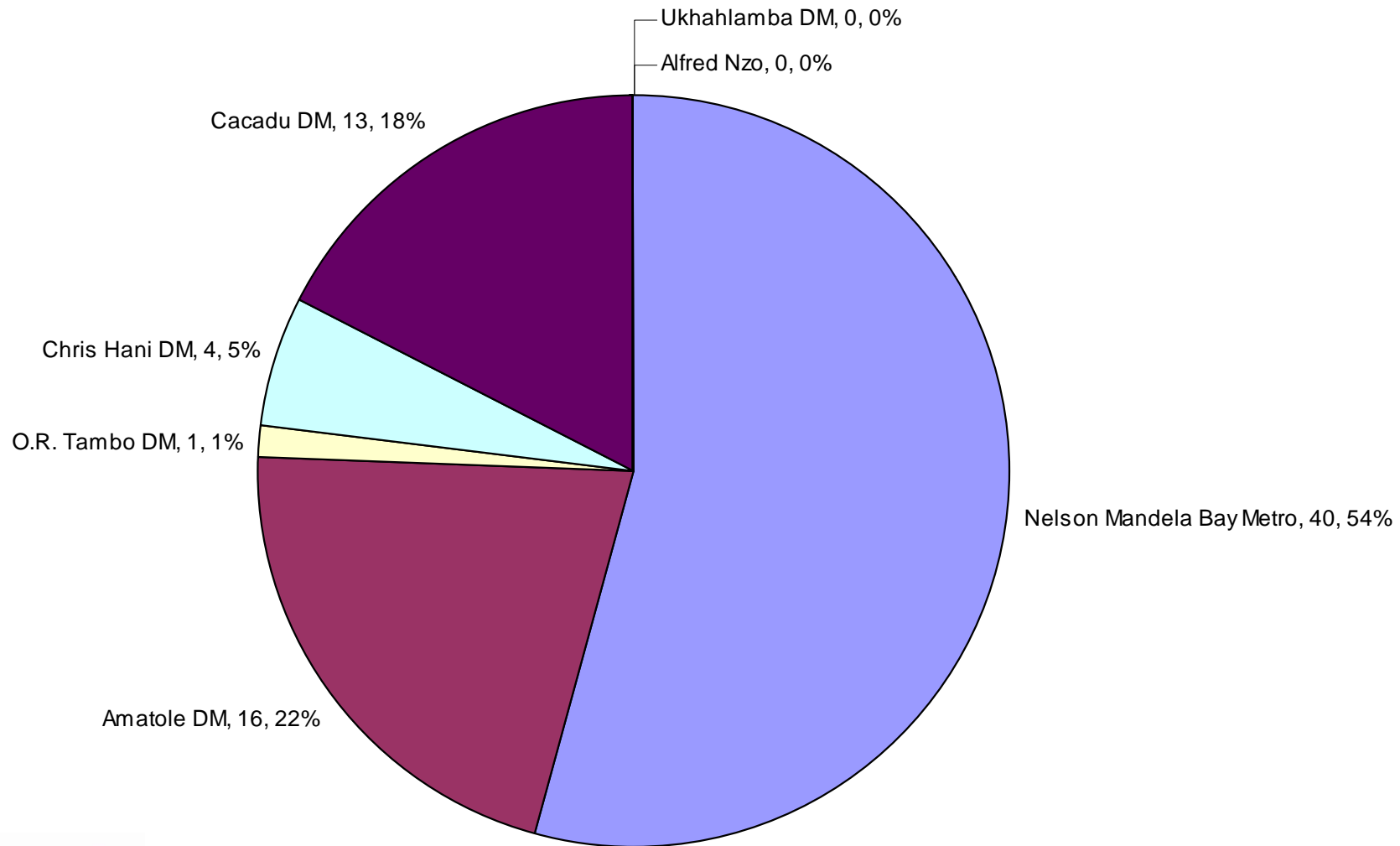
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# Provincial Overview

- Provincial distribution of registration certificates by metro / district
- Registration certificate profile (single vs multiple certificates)
- Distribution anomalies
- Dominant industrial type by province



# Eastern Cape



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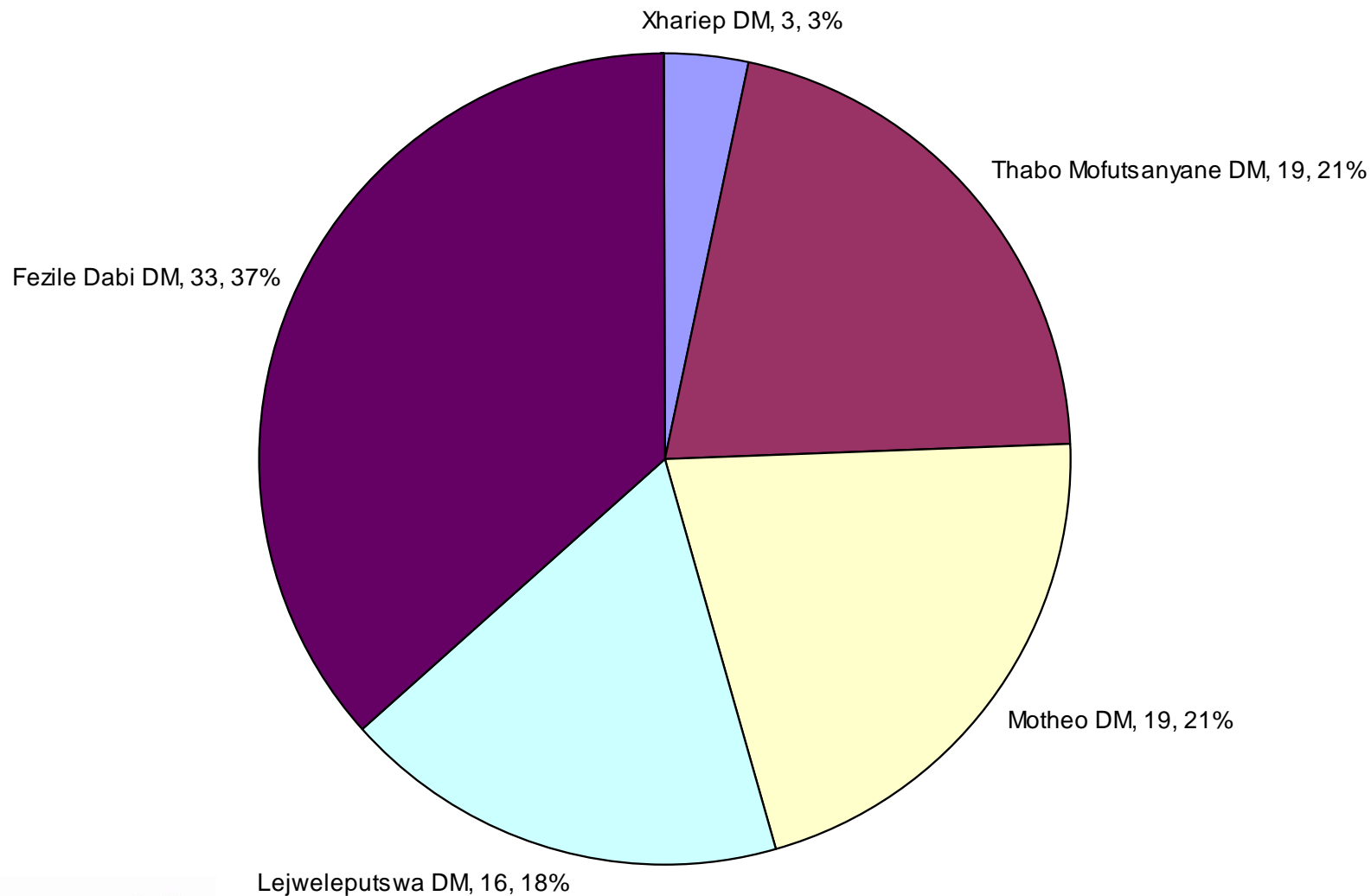


# Eastern Cape Overview

- 74 registered industries, 78 registration certificates
- Concentrated in the two major urban centres in the province (Port Elizabeth & East London)
- > 95% of companies have a single RC
- Dominant industry types
  - Brickworks
  - Incineration (hospitals)
  - Animal reduction (tanneries, rendering plants)



# Free State



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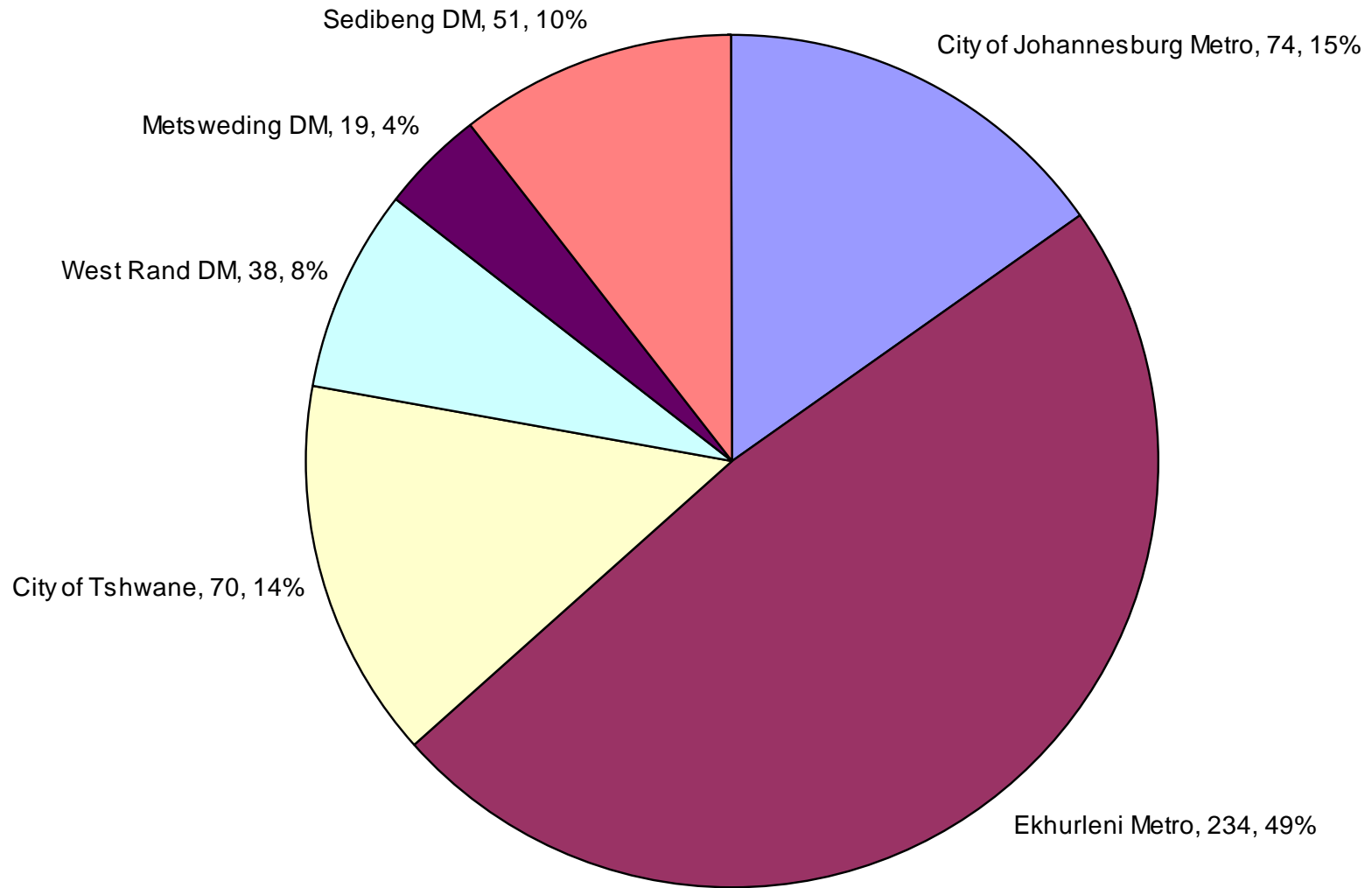
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# Free State Overview

- 90 registered industries, 145 registration certificates
- Concentrated in the southern part of the Vaal Airshed Priority Area, gold mining region and Bloemfontein
- 90% of companies have a single RC, but some large operations with multiple certificates (Sasol – 32 certificates)
- Dominant industry types
  - Incineration (hospitals)
  - Organic / Inorganic chemical industries
  - Asphalt plants



# Gauteng



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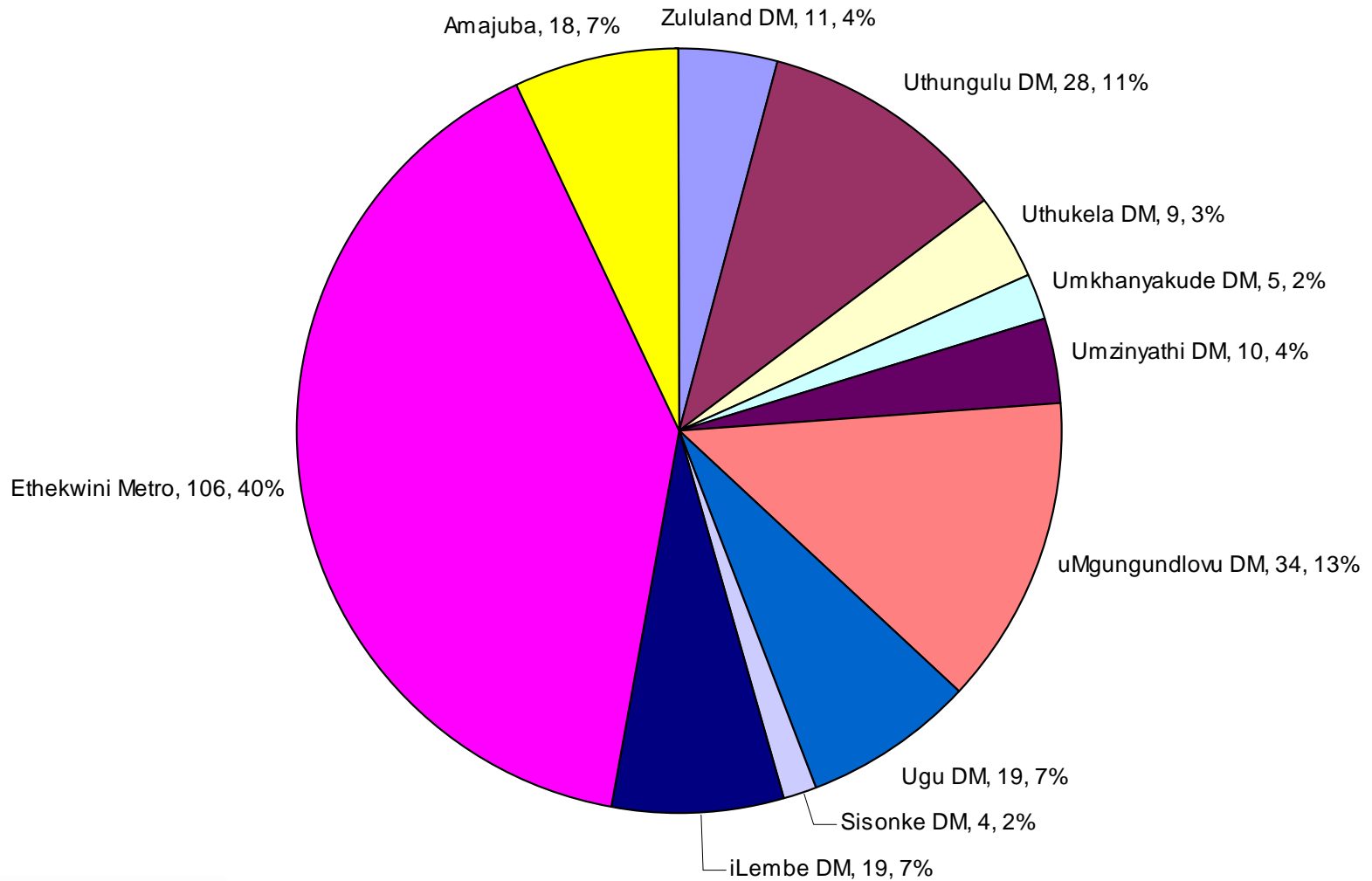
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# Gauteng Overview

- 486 registered industries, 714 registration certificates
- High density of industrial distribution across the province
- 16.3 % of companies have multiple certificates
- Dominant industry types
  - Metallurgical industry
  - Ceramic / Brickworks
  - Organic / Inorganic chemical industries



# KwaZulu Natal



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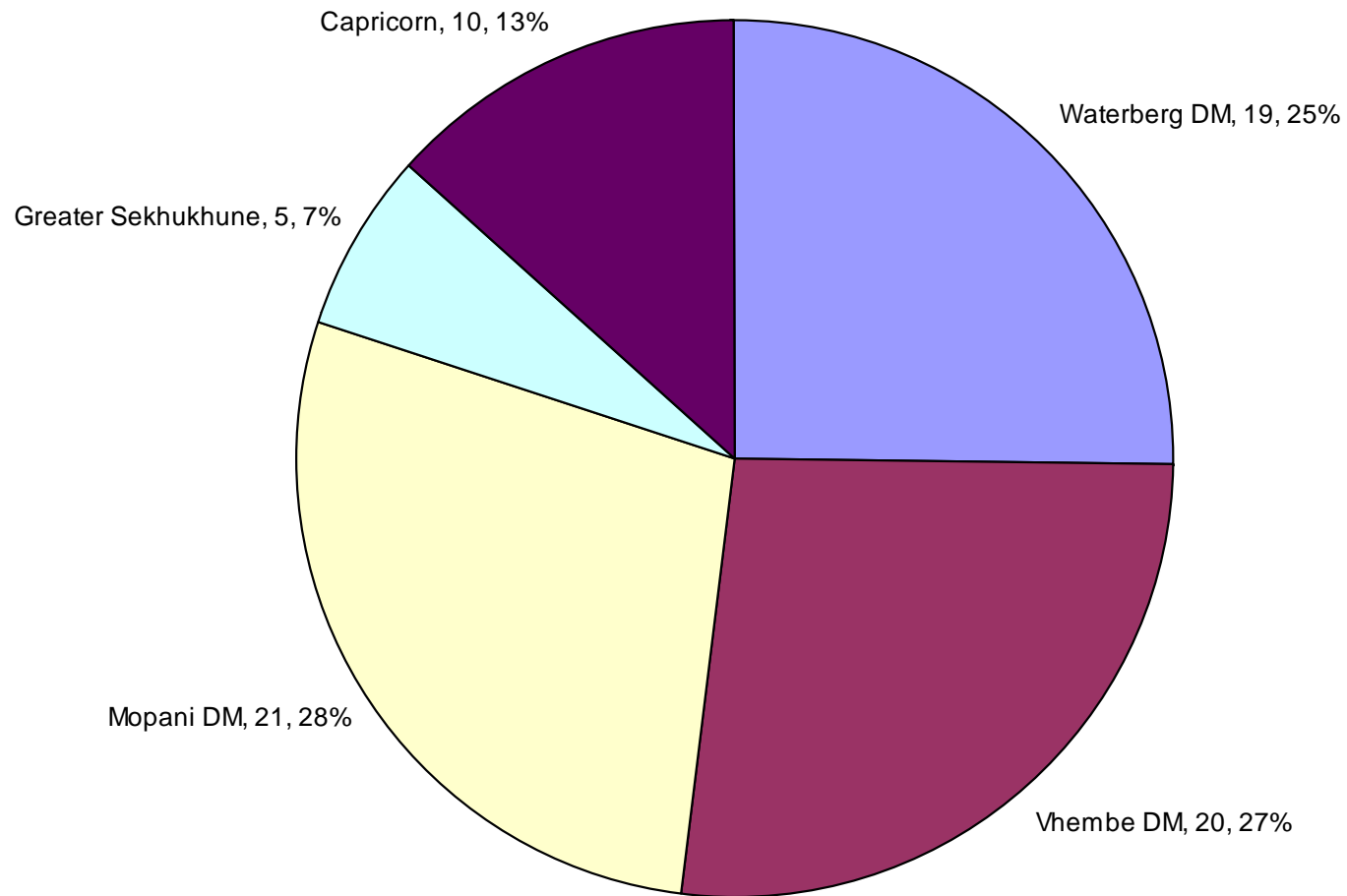
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# KwaZulu Natal Overview

- 263 registered industries, 332 registration certificates
- Concentrated in the major urban centres of the province (Durban, Richards Bay, Pietermaritzburg)
- 91% of industries have a single registration certificate, but a few operations with multiple certificates (Sappi, Mondi)
- Dominant industry types
  - Pulp and Paper / Wood Products
  - Ceramic / Brickworks
  - Organic / Inorganic Chemical Industries
  - Asphalt Plants



# Limpopo



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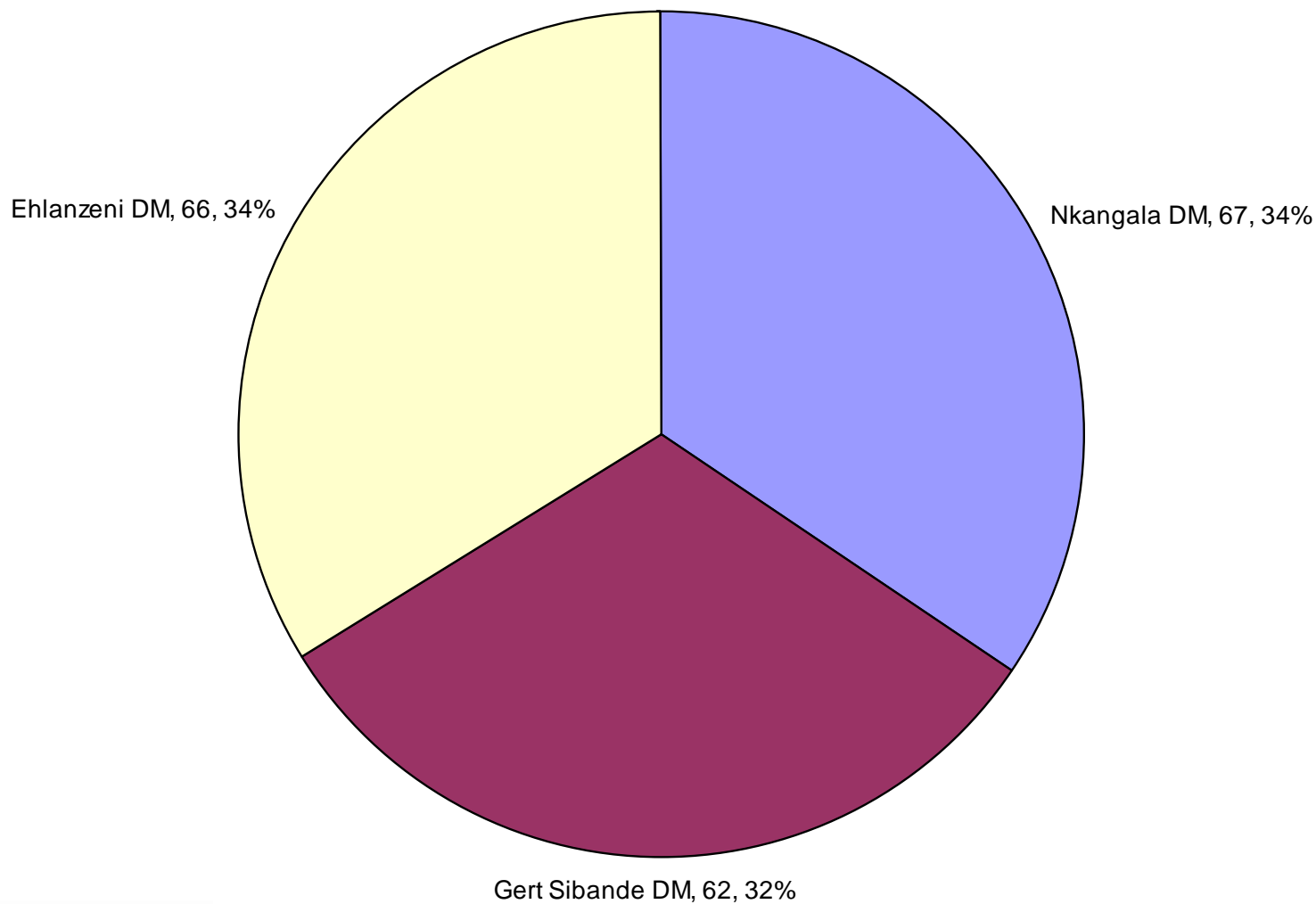


# Limpopo Overview

- 75 registered industries, 101 registration certificates
- Scattered across the urban centres in the province (Polokwane, Phalaborwa, Lephalale)
- 89% of companies have a single registration certificate, but a few operations with multiple certificates (Foskor – 6, Tubatse Ferrochrome – 5)
- Dominant industry types
  - Incinerators (Hospitals & Military Bases)
  - Ceramic / Brickworks
  - Wood Products (Sawmills & Charcoal)



# Mpumalanga



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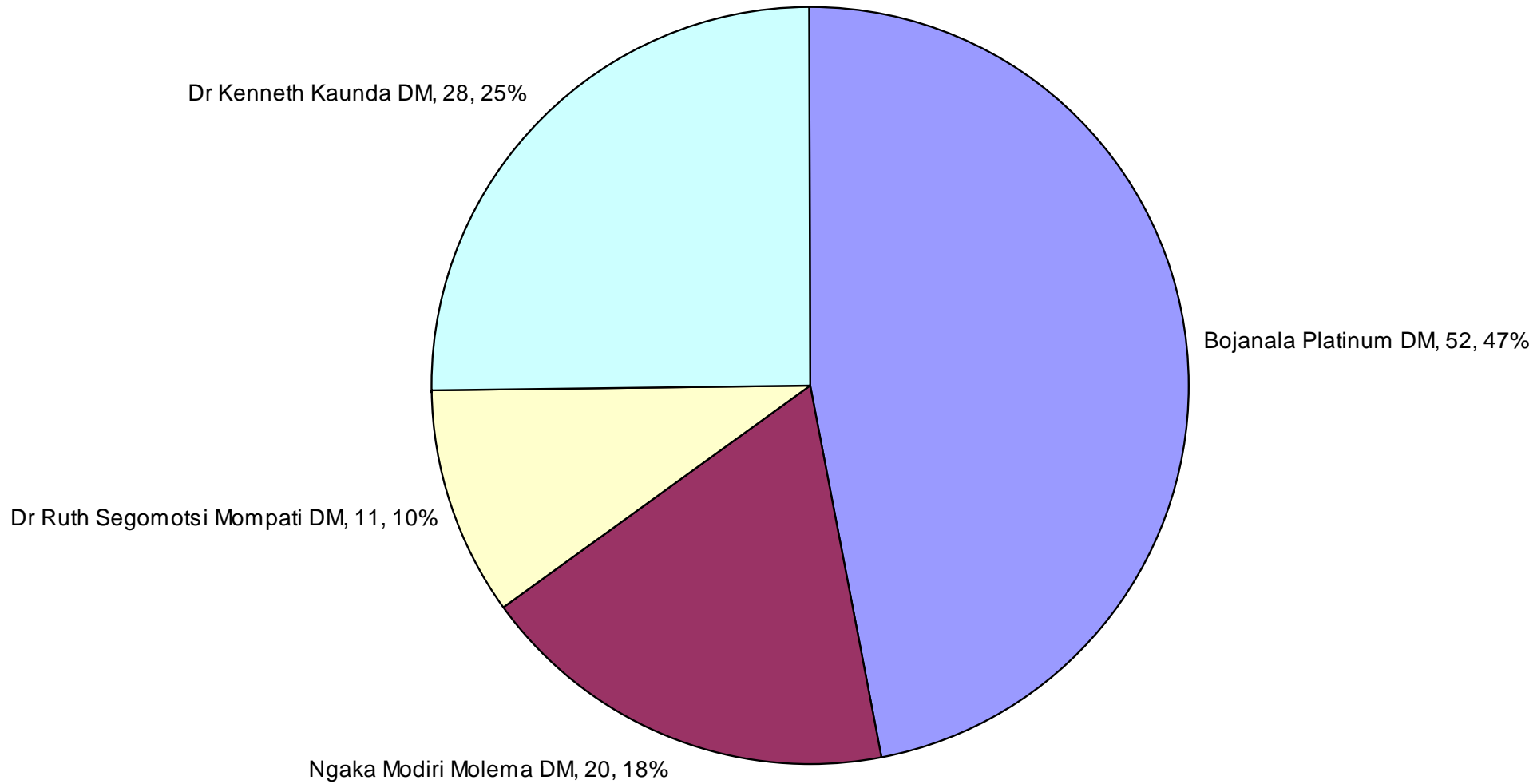
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# Mpumalanga Overview

- 194 registered industries, 385 registration certificates
- Scattered across the province with some clustering around the larger urban centres (Witbank, Middelburg, Nelspruit)
- 15% of companies have multiple certificates (Highveld Steel – 17, Sasol Secunda – 77)
- Dominant industry types
  - Power Generation
  - Ceramic / Brickworks
  - Wood Products
  - Metallurgical Industries



# North West



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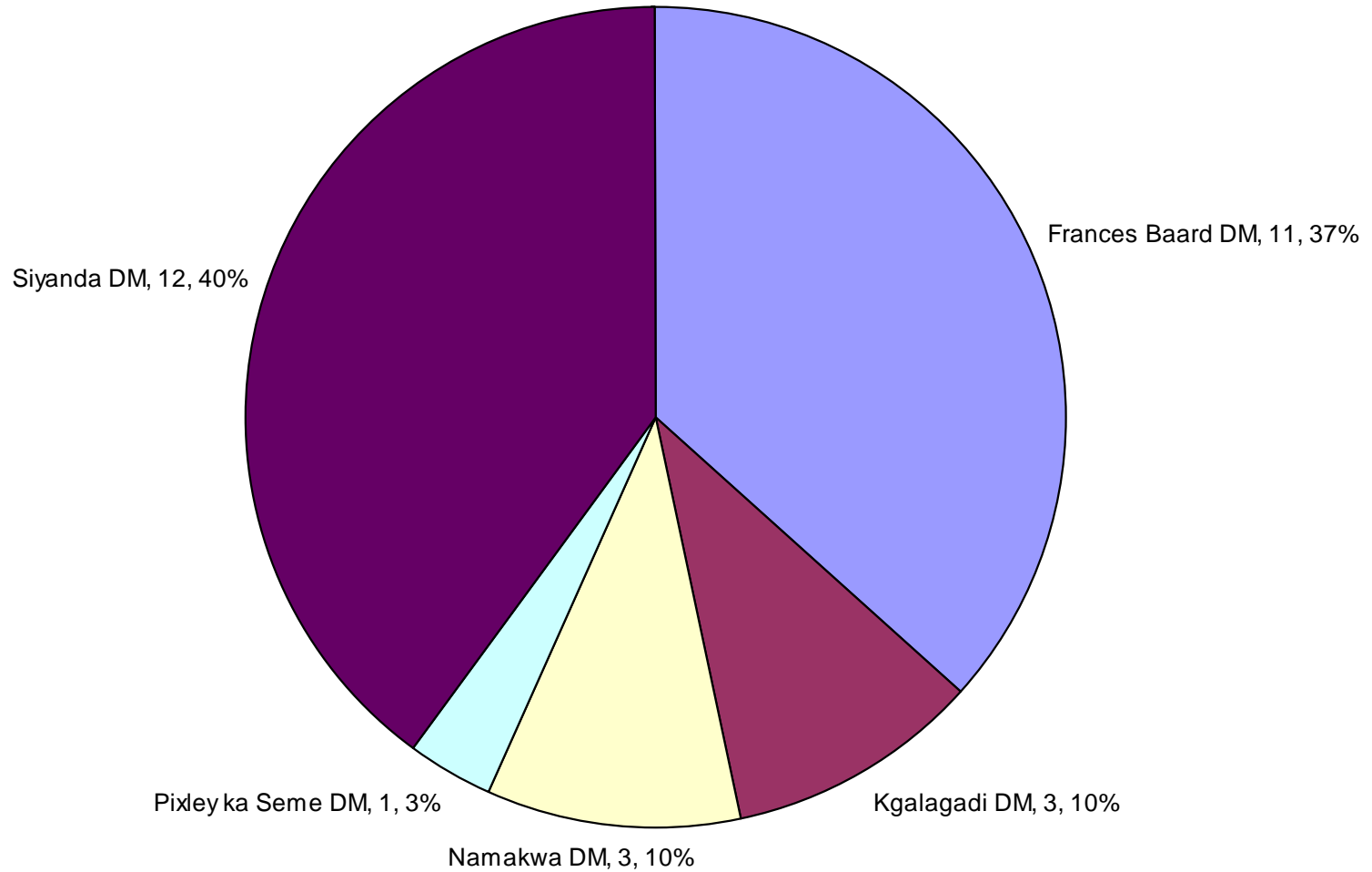
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# North West Overview

- 111 registered industries, 122 registration certificates
- Scattered across the province with some clustering around the larger urban centres (Rustenburg, Brits, Potchefstroom)
- 94% of companies have a single registration certificate, but a few operations with multiple certificates
- Dominant industry types
  - Mining Operations
  - Ceramic / Brickworks
  - Incineration (Medical Waste)



# Northern Cape



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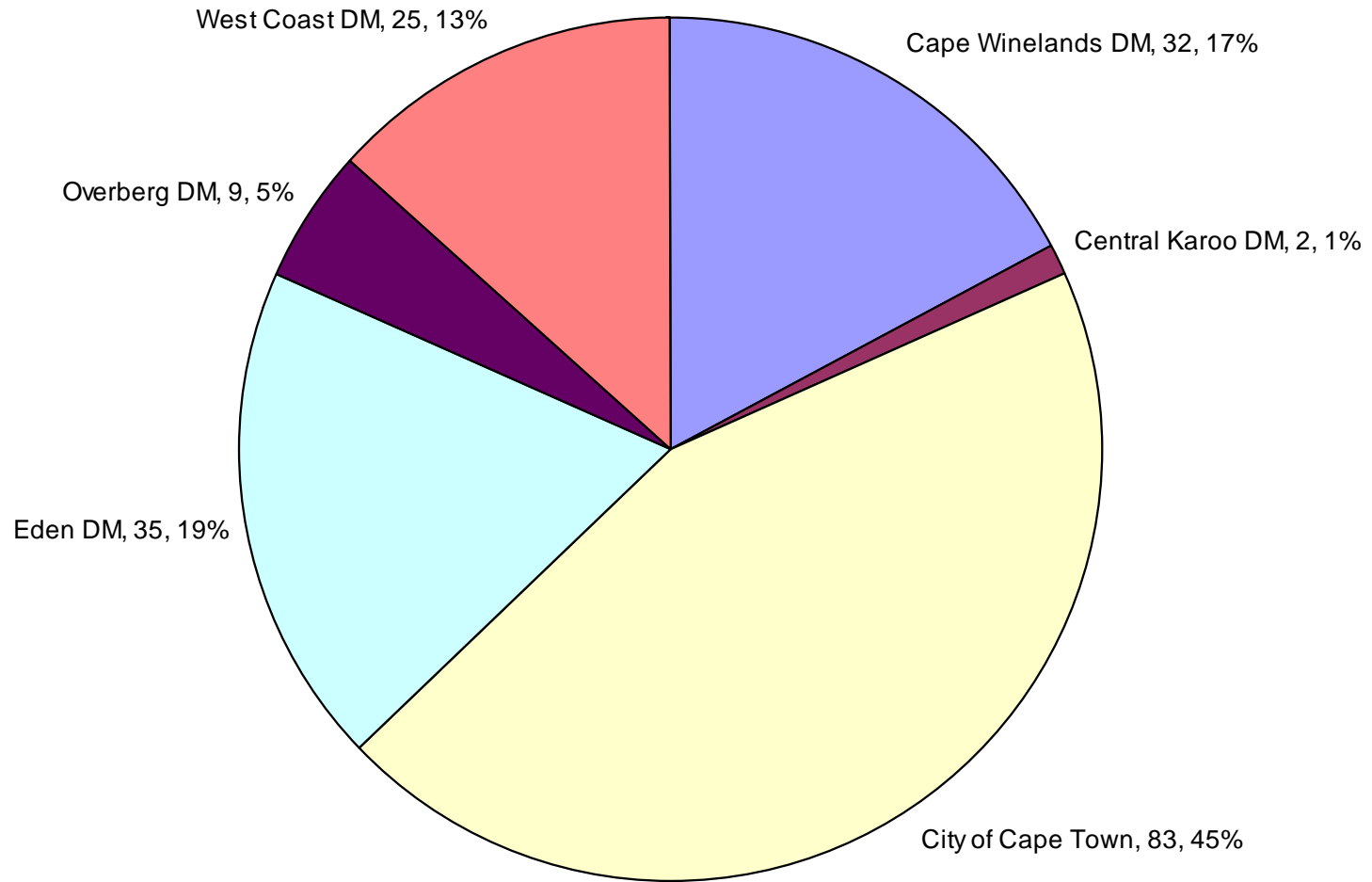
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# Northern Cape Overview

- 30 registered industries, 40 registration certificates
- Scattered across the province with some clustering around the larger urban centres (Kimberley, Upington)
- 90% of companies have a single registration certificate, but a few operations with multiple certificates
- Dominant industry types
  - Mining Operations
  - Ceramic / Brickworks



# Western Cape



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# Western Cape Overview

- 186 registered industries, 218 registration certificates
- Scattered around the coastal parts of the province (Cape Town, George, Saldanha Bay)
- 95% of companies have a single registration certificate, but a few operations with multiple certificates (PetroSA, ArcelorMittal)
- Dominant industry types
  - Ceramic / Brickworks
  - Animal Reduction Matter
  - Metallurgical



# Way Forward

- Updating of the APPA / AEL database
- Weeding out of closed / non-operational industries
- Illegal operations (unregistered)
- Expired provisional registration certificates
- Prioritise roll out of licencing function
- Support from national department
  - Templates
  - Manuals
  - Capacity Building



# THANK YOU FOR YOUR KIND ATTENTION



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