Gauteng Integrated Energy Strategy

Energy Planning Colloquium
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Gallagher Estate
Mokomane Mekgoe



Presentation Outline

- Overview
- Energy Vision
- Key Goals
- Direction, principles and approach
- From Vision to Action
- Policy Implications
- Provincial targets
- Current initiatives



Overview: Why the Strategy

- To direct the way energy is supplied and used within the province during the next 5 to 45 years.
- To integrate all the initiatives to provide cohesion, alignment and co-operation
- Catalyst for change across the province
- Supporting the sustainable energy and climate change initiatives internationally, nationally and provincially



An Energy Vision for Gauteng

"A Gauteng province that is powered by a <u>low</u> <u>carbon economy</u> with a significant share of national <u>"green jobs"</u>, and accessible and <u>affordable energy services</u> that do not impact on the health of people or the environment."



Key Goals

- Province to provide the leadership and institutional framework required to drive the strategy forward.
- Implement strong energy efficient measures.
- Pave the way to develop and grow renewable and alternative energy options.
- Support the move towards a low carbon economy.
- Prioritize energy security and access to safe, clean and affordable energy.
- Develop and grow the alternative and energy efficiency industry as a critical aspect of Gauteng's economy.



Directions, Principles and Approach

- takes its lead from the national White Paper on Energy Policy (1998)
- Using the people as change agents
- portfolio-based approach
- maximise what can be done by provincial government
- province should lead by example



Vision to action- 10 Enablers

- Strategic Leadership
- Financial Mechanisms
- Local Government, Regulation And Market Support
- Promoting Innovation And Clean Energy Technologies
- Using Energy More Efficiently
- Sustainable Energy Supply
- Transport
- Affordability and wellbeing
- Empowering Consumers to Reach the Vision
- Institutional support



Gauteng Energy Use by Sector

• Industry = 44%

• Transport = 21%

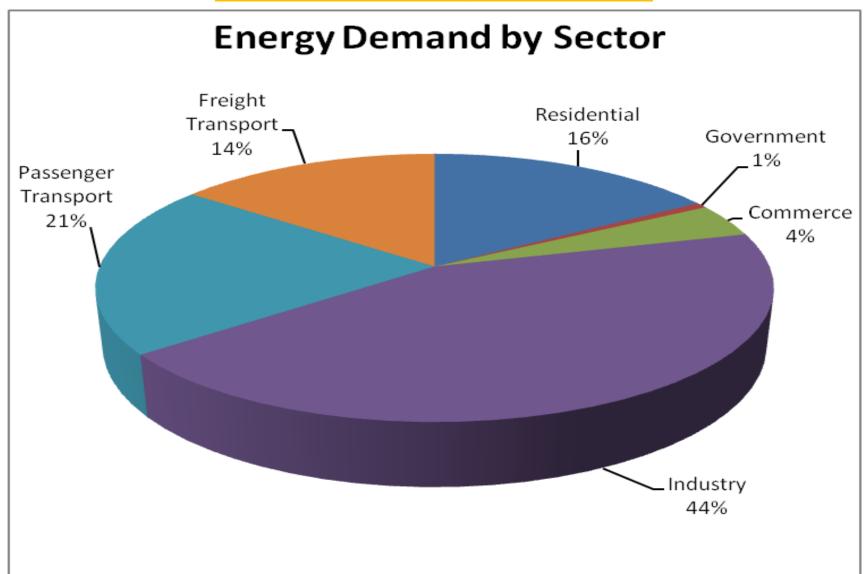
• Residential = 16%

• Freight & Transport = 14%

• Commerce = 4%

• Government = 1%

Demand By Sector



Policy implications

- Shifting to a low carbon economy
- maximizing the use of local energy resources
- development of the renewable energy industry as an employment creation opportunity
- Moving towards a portfolio based approach
- Job creation
- skills enhancement and capacity building within province



Opportunities

- Creating a sustainable transport system –reducing CO2 emissions
- Improving energy efficiency and Job creation
- promote economic development and competitiveness of industries
- Position the province towards a low-carbon economy
- financing mechanism for renewable energy
- maximise the province's contribution to achieving the national target
- co-operation and collaboration between government departments and stakeholders



Challenges

- Capacity of smaller municipalities
- heavily reliant on non-renewable resources for energy
- Lack viable energy alternatives
- deepening poverty and inequality growing service delivery backlogs in housing and electrification
- limited mandate that provinces have around energy
- Lack of energy data
- Lack of institutional arrangements to drive the strategy



The future of energy in Gauteng

- low carbon economy
- hub of innovation, focused on clean energy technology
- solar water heater on every roof
- Poverty reduction, reduced pollution, improved quality of health and safety
- Decentralised energy generation-micro generation
- clean and renewable energy will contribute 50% of the energy mix



Current Initiatives

- Green Economy PMO province working in partnership with other GPG Departments and Municipalities.
- Pilots on the utilisation of LPG Gas as an alternative fuel in taxis and government fleet.
- Energy efficiency interventions taking place at GPG buildings (Offices, Hospitals, Schools and ongoing Energy Audits,
- The rolling out of the Solar Water Heaters at Ekurhuleni, Joburg, Tshwane and Sedibeng municipalities.
- The Innovation Hub and Blue IQ tasked to promote the development of local technology through R&D, commercialisation of local technologies.
- The skills programmes aimed at training up artisans, technicians and technical professionals



Thank you for your attention.



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