

*THE GAUTENG STATE OF ENERGY REPORT – EVOLUTION OF GAUTENG
PLANNING FROM 2010 TO 2018 AND BEYOND -*

COLLOQUIUM ON ENERGY

FOR THE GAUTENG MEGACITY REGION:

RETROSPECTIVE AND PROSPECTIVE 05 April 2019

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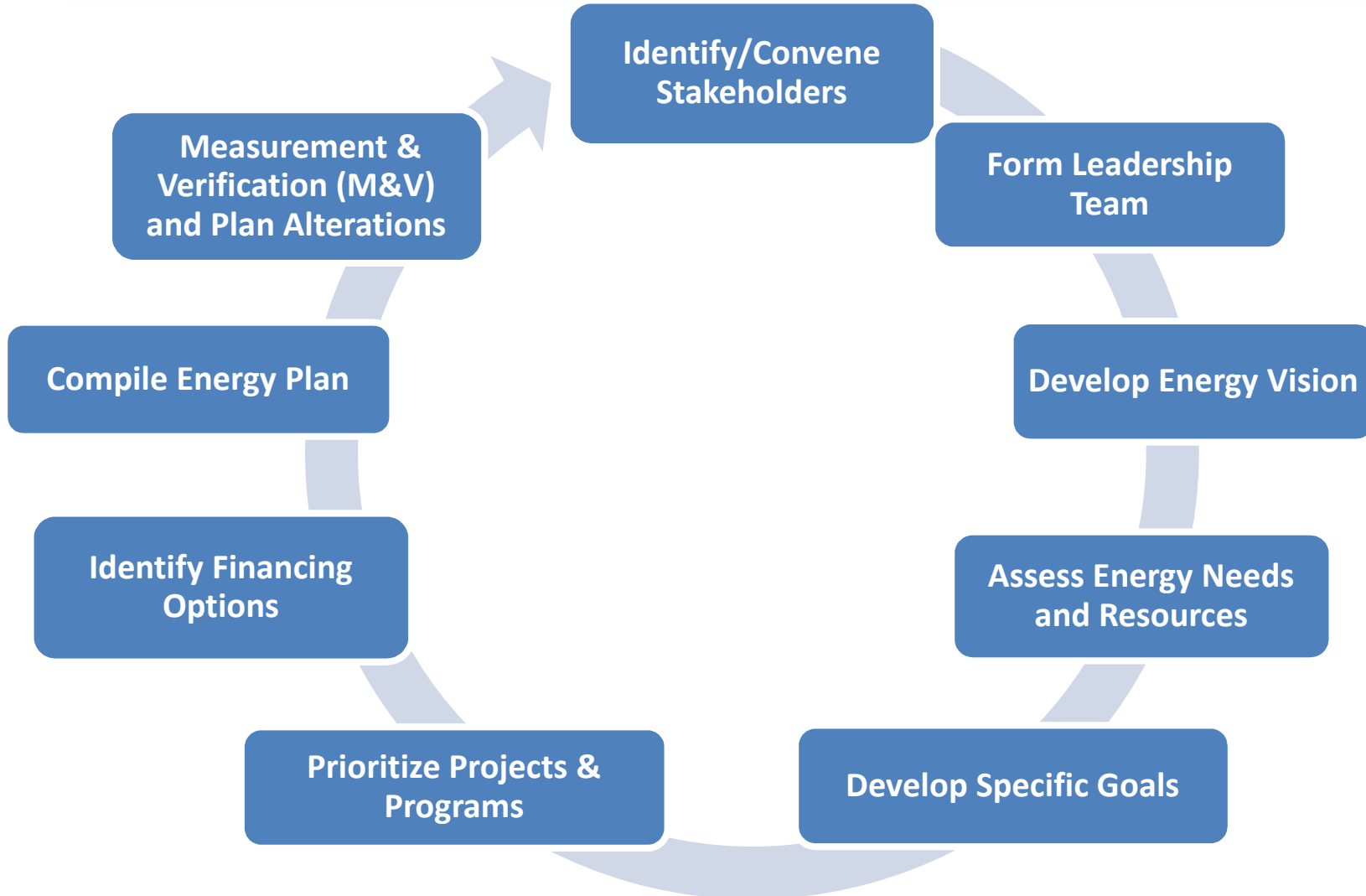
05 April 2019



AGENDA

- Steps in Energy Planning
- Gauteng Integrated Energy Strategy (GIES)
- Gauteng Energy Security Strategy (GESS)
- Structures Impacting on Provincial Energy
- State of Energy Report
- Summary

Steps in Strategic Energy Planning



Inclusive Process

Stakeholder buy-in to
long-term vision

Political commitment to mobilize
authority and resources

Identify energy uses and future
needs (baseline)

GAUTENG INTEGRATED ENERGY STRATEGY

- In 2008, South Africa was faced with a major challenge in the energy sector – the country experienced electricity outages and a rapid increase in fuel prices.
- Energy cuts across all aspects of people’s lives – from transport to education to health to food.
- Every decision that is made usually has an energy dimension, impact or influence.
- It is only when energy is not available that the importance of this valuable resource is realised.

GIES

- The main purpose of the GIES and implementation plan was to direct the way that energy was to be supplied and used within the Gauteng province during the next 4 years (2014); 15 years (2025); 45 years (2055) and beyond, in an integrated and comprehensive manner.
- Many government departments, civic organisations and municipalities had various sustainable energy and climate change initiatives and projects that were being undertaken.
- What this strategy aimed to do was to bring cohesion to all these laudable projects.

Gauteng Energy Security Strategy

Gauteng energy security of supply and emissions reduction



Gauteng has adopted the energy carrier supply and demand outlook aligned to the national energy governance and planning.

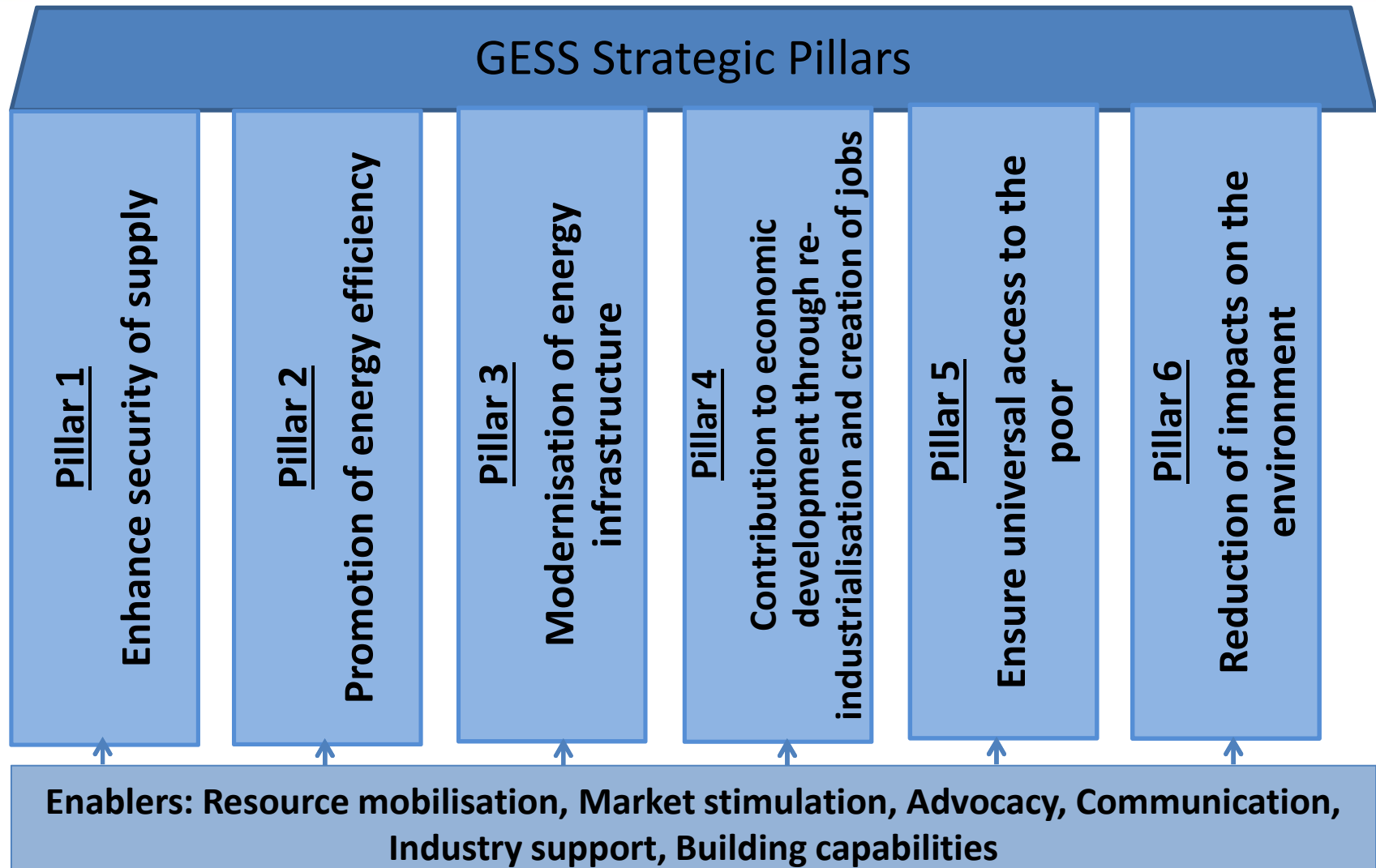
Gauteng Energy Security Strategy

- One of the key outcomes of the GIES was the establishment of an Energy Office within Cooperative Governance and Traditional Affairs (CoGTA) to coordinate and facilitate the implementation.
- However, the GIES did not meet all outcomes and the targets set due to the absence of a state of energy baseline study to help monitor, evaluate and measure progress.
- GIES was reviewed and updated as the Gauteng Energy Security Strategy (GESS) in 2016.

Gauteng Energy Security Strategy

- The GESS builds on the GIES to ensure that the province becomes more resilient to energy supply constraints which is as an impediment to economic growth and social development as articulated in the vision statement.
- “A resilient and energy secure province that invests in diversified low-carbon energy sources and innovative technologies, that delivers reliable and affordable energy services to all citizens, and contributes to an economically transformed and modernized and re-industrialized Gauteng City Region”

GESS PILLARS



Roadmap

Intensify the use of alternate energy sources

Increase use of abundant solar energy sources; LPG, CNG, LNG, biogas, biomass and landfill gas).

Leapfrog to distributed generation

Drivers and Enablers

Governance, integrated policy and decision making

Metrics, accounting, and reporting

Awareness

Open and competitive markets

Finance and investment

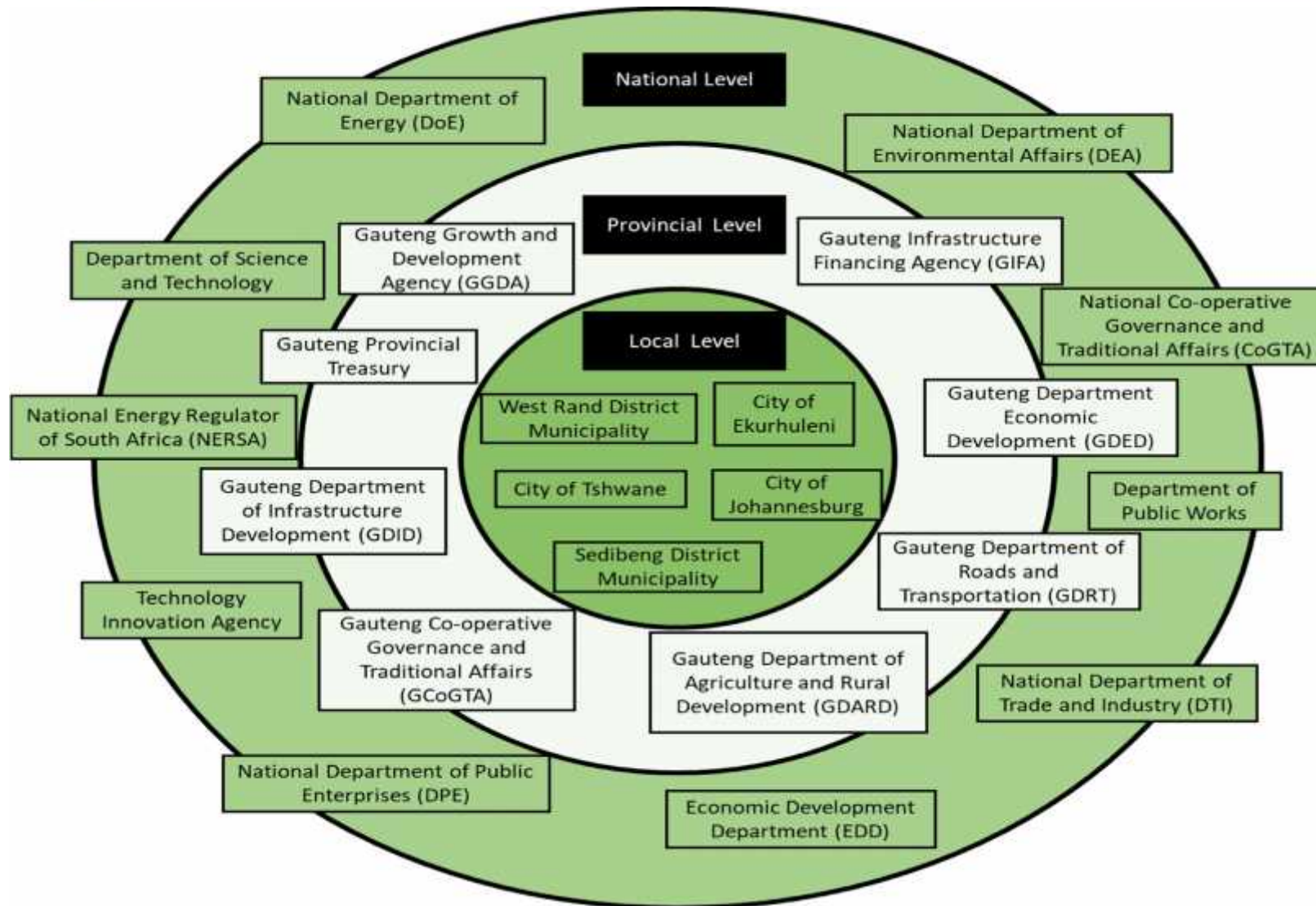
Life Cycle Approach

Resource Efficiency & Decoupling

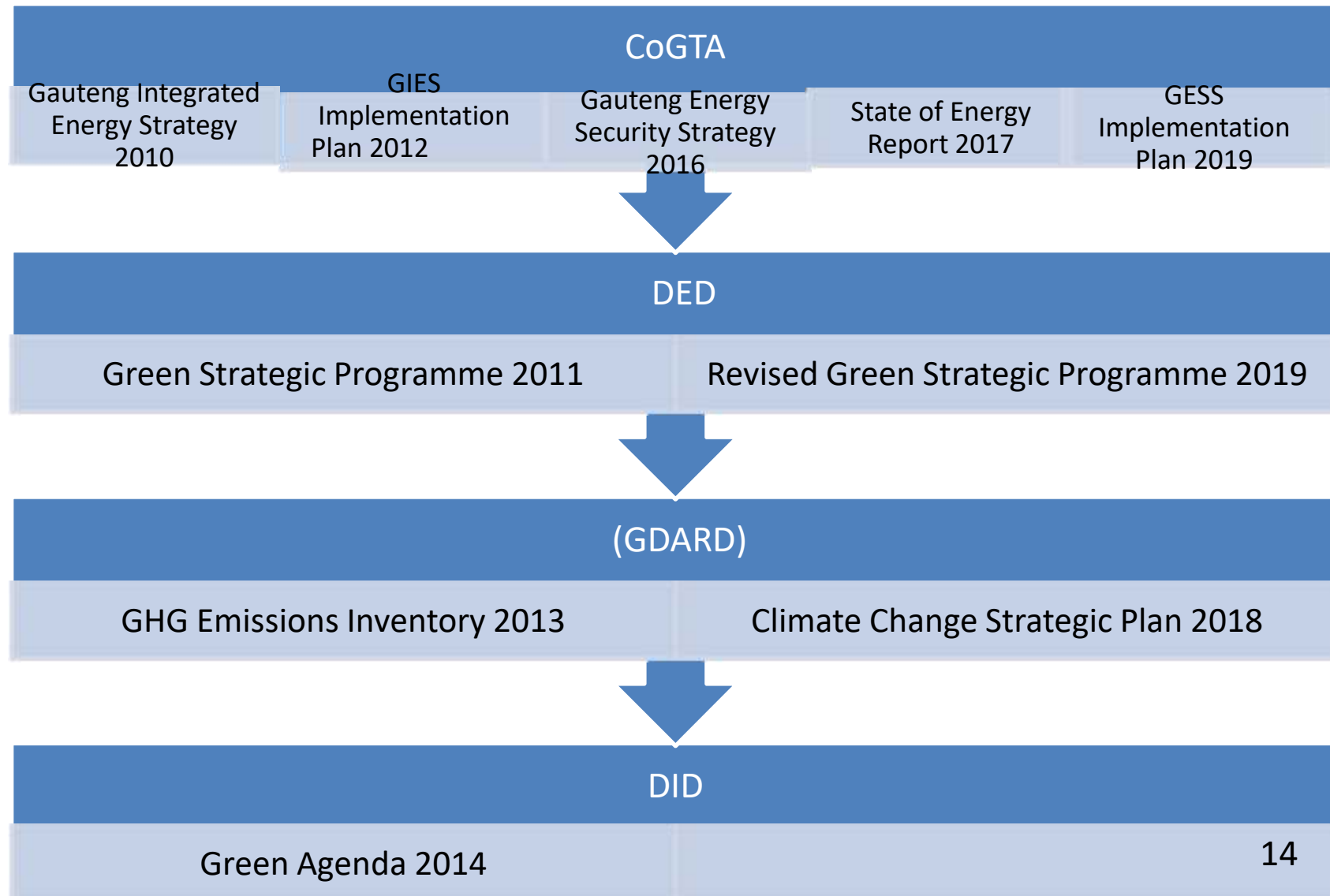
State of Energy Report

- The State of Energy Report for Gauteng provides a snapshot of energy supply and demand by carriers.
- The report reviews energy supply carriers (coal, electricity, natural gas, liquid fuels and renewable energy) and the demand sectors (domestic/residential, commercial, industrial, agricultural and transport) from 2010-2017.
- The study presents Gauteng's energy balance – the sum of energy supply and demand – and profiles the trends in energy supply and demand for the past 7 years.
- A projection on the use of energy for upto 2020 is presented based on the supply and demand patterns.

Structures impacting on provincial energy



Gauteng Energy Planning



Summary

- Provincial Energy Planning
 - Lack of clear mandate hampers provincial energy planning
 - Collaborative effort needed to align provincial strategies with local municipalities strategies
 - The South Africa Local Government Association (SALGA) Energy Efficiency and Renewable Energy Strategy: that being to **assist** local government to undertake energy efficiency (EE) and renewable energy (RE) developments.
- The Gauteng State of Energy report developed in 2018 (available on request)
- An implementation plan for the GESS is currently being developed

Thank you