

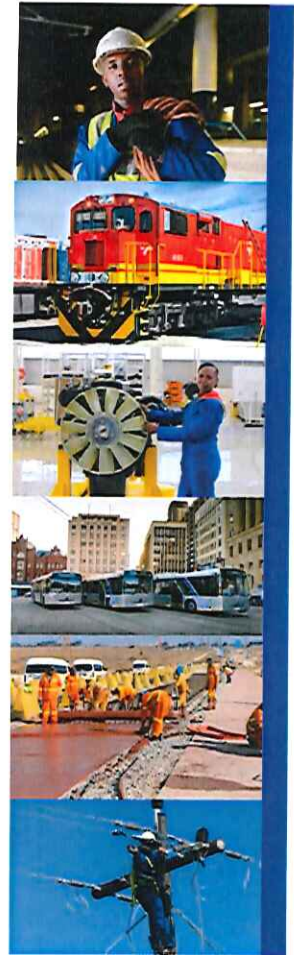
171010 PICC

REPORT ON PICC

A common vision:

***Accelerate the delivery of
infrastructure to improve the
lives of all South Africans***

Parliament Economic Cluster Committees
October 2017



Report on:

Part 1 Background

- Importance of Infrastructure in Development
- Infrastructure Challenges
- Establishment of the PICC

Part 2 Work of the PICC

- Progress Reporting
- New Challenges
- Response

Part 3 Conclusion

Part 1

Background

2

Importance of Infrastructure in Development

3

Infrastructure as a key driver

- Infrastructure: the **foundation for long-term growth** and development in all societies
 - **Critical for economic performance**: business and investment dependent on energy, transport logistics, communications and water infrastructure and on the skills that flow from education infrastructure as well as the health of the country's workforce dependent on medical infrastructure
 - **Key to service delivery**, with water, sanitation, electricity, public transport, education and health-care all underpinned by infrastructure
 - **Supports a number of industries**, from construction to steel and cement manufacture; and professions such as engineering and the artisanal trade and is thus a major creator of employment
 - Uses inputs that can **stimulate industrialisation** and technology innovation
 - Can **reverse the spatial geography and economics** of apartheid, promote balanced economic development, unlock economic opportunities across all nine provinces, promote mineral extraction and beneficiation and support rural inclusion and development
 - **Promote broad based BEE**, job creation, youth employment
 - **Support regional economic integration** and intra-African trade
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4



Infrastructure – a background

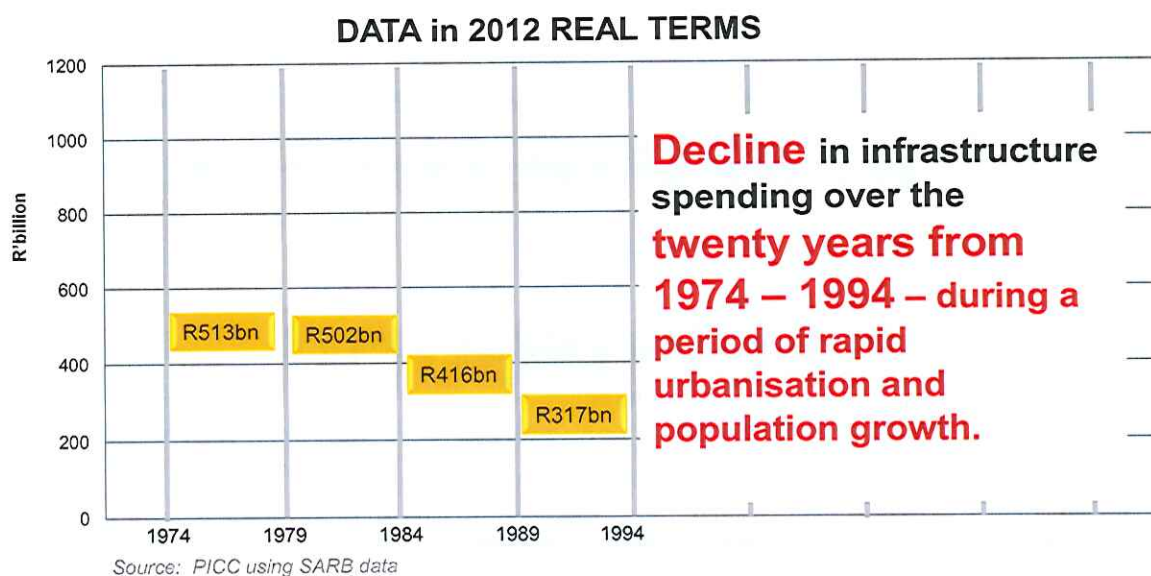
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Infrastructure challenges before 1994

- Reinforced apartheid systems:
 - excellent infrastructure for a minority and exclusion of the majority
 - Townships built away from key centres of employment; homelands became dumping grounds for 'surplus labour'
 - townships under-developed and largely without critical infrastructure
 - example: an energy surplus while majority of people lived without electricity, only 5,2 million houses connected to the energy grid electricity
- As protests grew against the system
 - spending focus on military and security apparatus
 - decline in infrastructure spending over the twenty years from 1974 – 1994

6

Infrastructure spend up to 1994



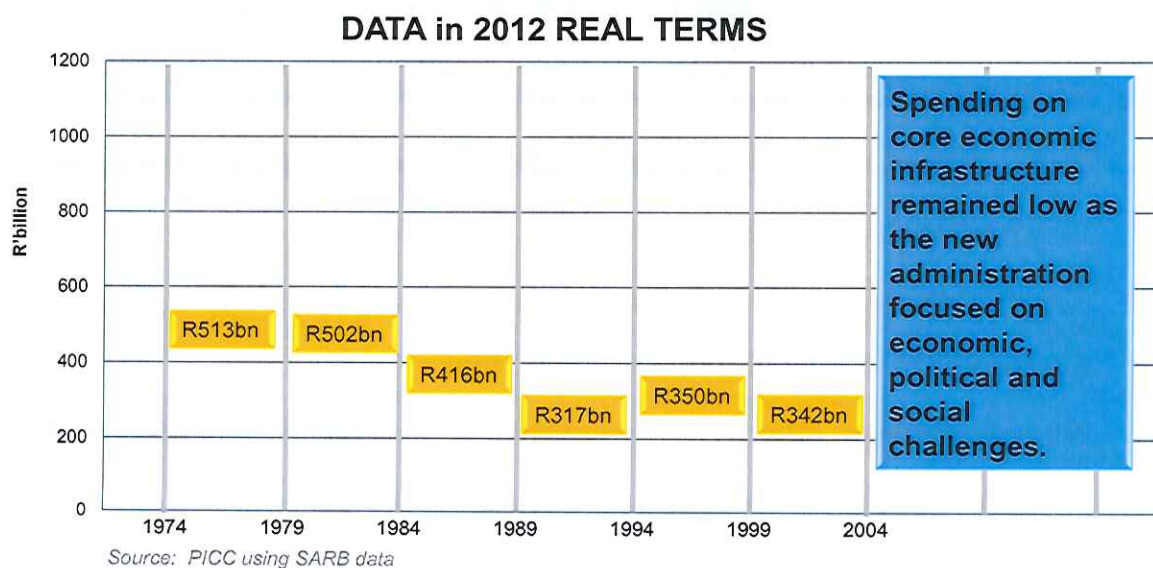
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Post 1994

- **Consolidation of the institutions of democracy:**
 - parliament,
 - judiciary,
 - provinces,
 - new municipal systems
- **Opening the economy**
 - reforming the labour market: worker rights
 - trade policy: liberalisation
 - Competition laws
 - Corporatising state-owned companies
- **Focus on social infrastructure and welfare policies**
 - Massive housing programme: 'RDP houses'
 - Connecting townships to the energy and water systems
 - Increasing access to schools and universities
 - Deracialising social grant payments

8

Infrastructure spend in first decade after 1994



9

The Urbanisation Challenge

Johannesburg as example



10

Transport Challenge

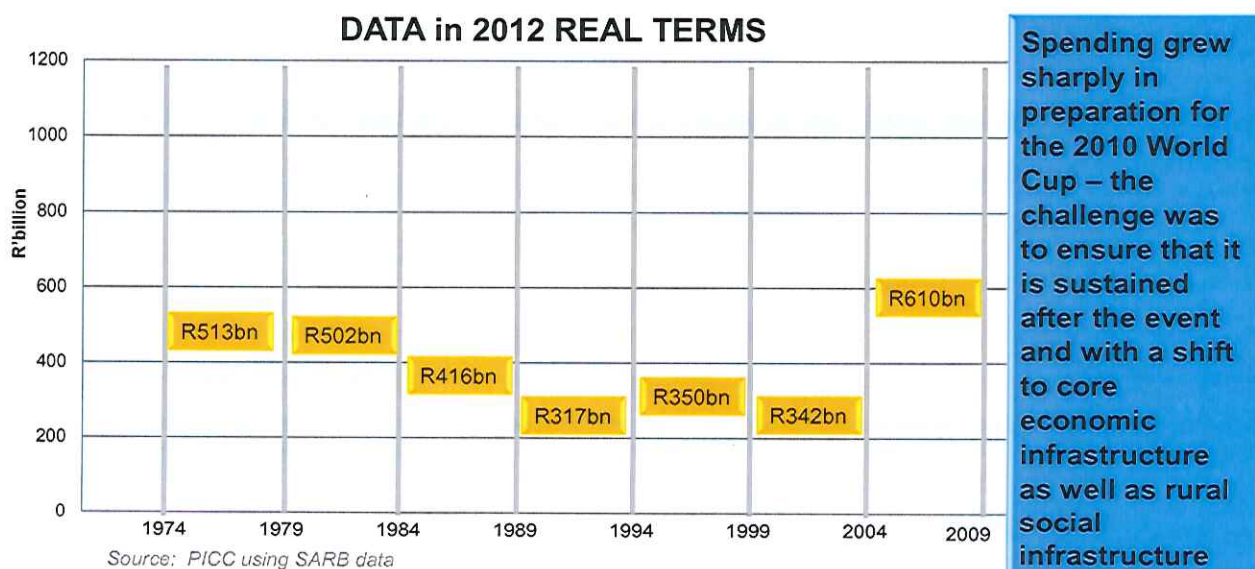
- **60's to mid-80's** ➡ **3% to 5% of GDP** invested in transport;
- Reduced to **1.5% to 2.5%** of GDP **over next 25 years** until 2008;
- **Freight transport** ➡ **Rail (12%) / Road (88%) modal split**, uncompetitive, negative impact on road infrastructure
- **Road freight congestion** in urban areas, especially at or near termini (ports, container termini and airports);
- **Fragmented development patterns** hinder consistent and integrated rural transportation system development;
- **>70%** of SA spend at least **30%** of income on transport;

ASGISA, 2010 World Cup and recession

- Strong economic growth fuelled by the commodity boom in the mid-2000
- Gaps in infrastructure became evident
- ASGISA programme and 2010 World Cup Bid
- Stadium-builds
- Airports (eg King Shaka International)
- Gauteng Highway (GFIP)
- Gautrain
- Tourism infrastructure
- Economic infrastructure identified but not yet prioritised
- By 2010, the country was recovering from the recession caused by the global economic crisis and loss of 1 million jobs
- New Growth Path economic framework adopted in October 2010
- Identified ten jobs drivers – infrastructure was the first and trigger jobs driver

12

Infrastructure spend to 2009



13



Establishment of the PICC

14

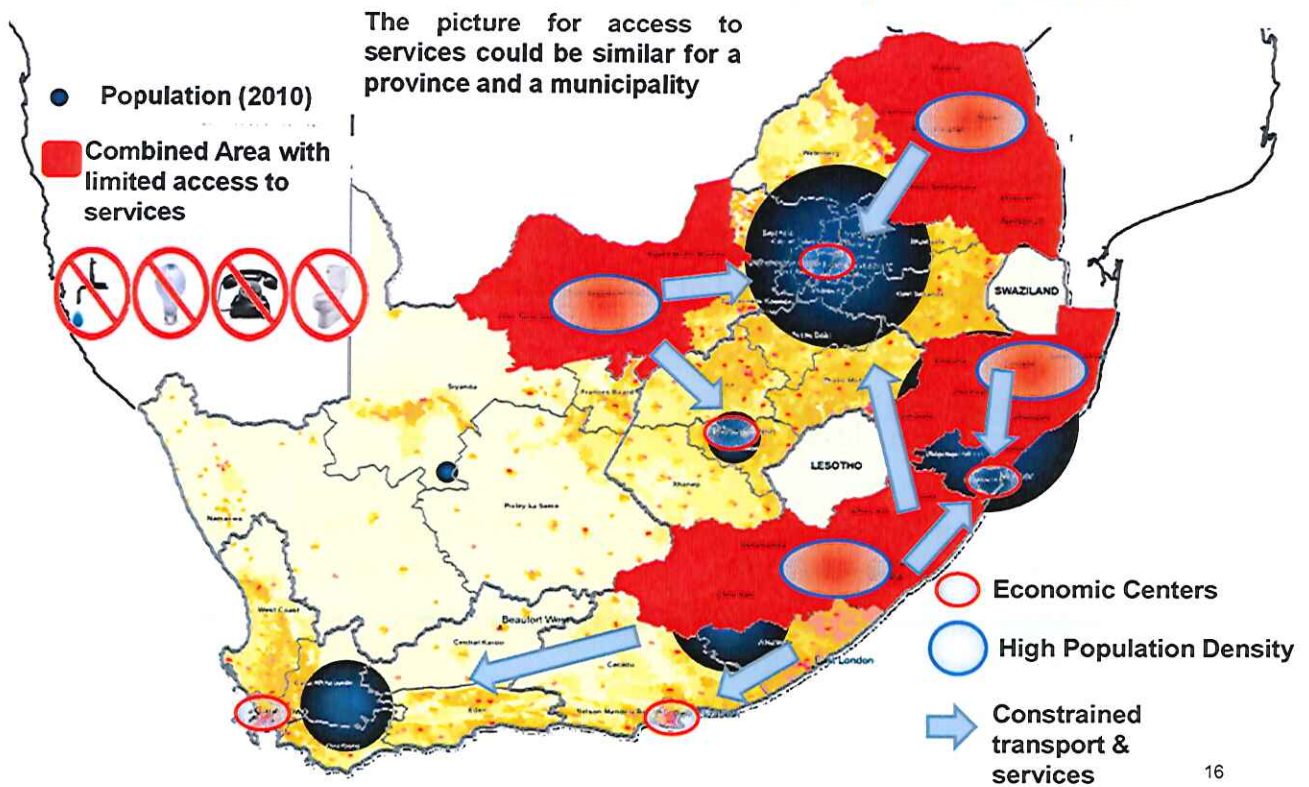
Background to the PICC

- By **2011**, Cabinet began to focus on **post-World Cup infrastructure**
- **Situation analysis** done which identified weaknesses inter alia in
 - Coordination
 - Reliable data on the build-programme
 - Forward-planning
 - Integration across spheres and between programmes
- **A non-statutory structure** was created by Cabinet at the July 2011 Lekgotla – a Presidential Infrastructure Coordinating Commission (PICC)
- **Mapping exercise** done that looked at economic, social and infrastructure links
- This was used to put together the **National Infrastructure Plan**.

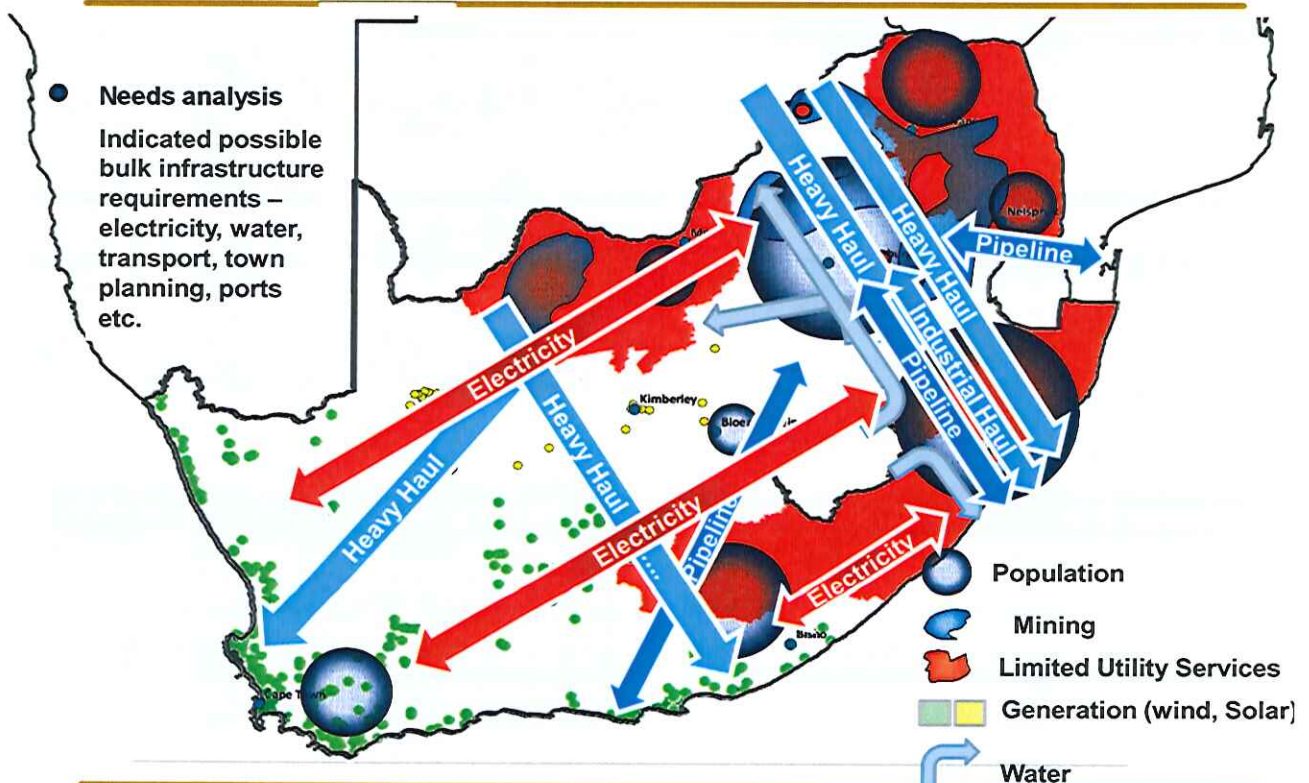
15

Population & Access to Utilities

Population (2010) Access to utilities



Overview of Need Analysis



National Infrastructure Plan

- Originally, PICC identified more than 300 projects, in different stages of development
 - 'good idea' (pre-feasibility)
 - under-going feasibility
 - Stuck with regulatory approvals (eg EIA)
 - Ready for implementation but unfunded
 - Under construction
 - Completed but not handed over due to lack of operational of maintenance budgets
- Work done on the project pipeline to identify their synergies and connection to national goals
- A number of these projects were brought together in 18 Strategic Integrated Projects (called SIPs)

18

Geographic SIPs

SIP 1: Unlocking the Northern Mineral Belt with Waterberg as the Catalyst

Investment in rail, water pipelines, energy generation and transmission infrastructure will catalyse unlocking of rich mineral resources in Limpopo resulting in thousands of direct jobs across the areas covered. Urban development in the Waterberg will be the first major post apartheid new urban centre and will be a "green" development project.

Mining includes coal, platinum and other minerals for local use and export, hence the rail capacity is being extended to Mpumalanga power stations and for export principally via Richards Bay and in future Maputo (via Swaziland link).

The additional rail capacity will shift coal from road to rail in Mpumalanga with positive environmental and social benefits. Supportive logistics corridors will help to strengthen Mpumalanga's economic development.

Primary Mineral Reserves



SIP 2: Durban- Free State- Gauteng Logistics and Industrial Corridor

Strengthen the logistics and transport corridor between SA's main industrial hubs; improve access to Durban's export and import facilities, raise efficiency along the corridor and integrate the Free State Industrial Strategy activities into the corridor and integrate the currently disconnected industrial and logistics activities as well as marginalised rural production centres surrounding the corridor that are currently isolated from the main logistics system.



19

Geographic SIPS

SIP 3: South Eastern node & corridor development

Promote rural development through a new dam at Umzimvubu with irrigation systems and the N2- Wildcoast Highway which improves access into KZN and national supply chains; strengthen economic development in PE through a manganese rail capacity from N Cape, a manganese sinter (NC) and smelter (EC); possible Mthombo refinery (Coega) and transshipment hub at Ngqura and port and rail upgrades to improve industrial capacity and performance of the automotive sector.



SIP 5: Saldanha-Northern Cape Development Corridor

Develop the Saldanha-Northern Cape linked region in an integrated manner through rail and port expansion, back-of-port industrial capacity (which may include an IDZ) and strengthening maritime support capacity to create economic opportunities from the gas and oil activities along the African West Coast. For the Northern Cape, expansion of iron ore mining production



SIP 4: Unlocking the economic opportunities in North West Province

The acceleration of identified investments in roads, rail, bulk water and water treatment and transmission infrastructure will result in reliable supply, meet basic social needs and facilitate the further development of mining, agricultural activities and tourism opportunities and open up beneficiation opportunities in the North West Province.



20

Energy SIPS

SIP 8: Green Energy in support of the South African economy

Support sustainable green energy initiatives on a national scale through a diverse range of clean energy options as envisaged in the IPR2010 and to support biofuel production facilities.



SIP 9: Electricity Generation to support socio-economic development

Accelerate the construction of new electricity generation capacity in accordance with the IRP2010 to meet the needs of the economy and address historical imbalances.

SIP 10: Electricity Transmission and Distribution for all

Expand the transmission and distribution network to address historical imbalances, provide access to electricity for all and support economic development.

Align the 10-year transmission plan, the services backlog, the national broadband roll-out and the freight rail line development to leverage off regulatory approvals, supply chain and project development capacity.

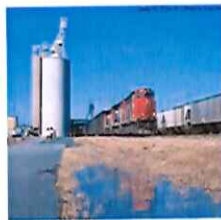


21

Spatial SIPS

SIP 6: Integrated Municipal Infrastructure Project

Develop a national capacity to assist the 23 least resourced districts (17 million people) to address all the maintenance backlogs and upgrades required in water, electricity and sanitation bulk infrastructure. The road maintenance programme will enhance the service delivery capacity thereby impact positively on the population.



SIP 7: Integrated Urban Space and Public Transport Programme

Coordinate planning and implementation of public transport, human settlement, economic and social infrastructure and location decisions into sustainable urban settlements connected by densified transport corridors.

SIP 11: Agri-logistics and rural infrastructure

Improve investment in agricultural and rural infrastructure that supports expansion of production and employment, small-scale farming and rural development, including facilities for storage (silos, fresh-produce facilities, packing houses); transport links to main networks (rural roads, branch train-line, ports), fencing of farms, irrigation schemes to poor areas, improved R&D on rural issues (including expansion of agricultural colleges), processing facilities (abattoirs, dairy infrastructure), aquaculture incubation schemes and rural tourism infrastructure.

22

Social Infrastructure SIPS

SIP 12: Revitalisation of public hospitals and other health facilities

Build and refurbish hospitals, other public health facilities and revamp 122 nursing colleges. Extensive capital expenditure to prepare the public health care system to meet the further requirements of the National Health Insurance (NHI).



SIP 13: National school build programme

A national school build programme driven by uniformity in planning, procurement, contract management & provision of basic services. Replace inappropriate school structures and address basic service backlog & provision of basic services under the Accelerated School Infrastructure Delivery Initiative (ASIDI). In addition address national backlogs in classrooms, libraries, computer labs and admin buildings. Improving the learning environment will go a long way in improving outcomes especially in the rural schools as well as reduce overcrowding.

SIP 14: Higher Education Infrastructure

Infrastructure development for higher education focusing on lecture rooms, student accommodation, libraries and laboratories as well as ICT connectivity. Development of university towns with combination of facilities from residence, retail and recreation & transport. Potential to ensure shared infrastructure such as libraries by universities, FETs & other educational institutions.

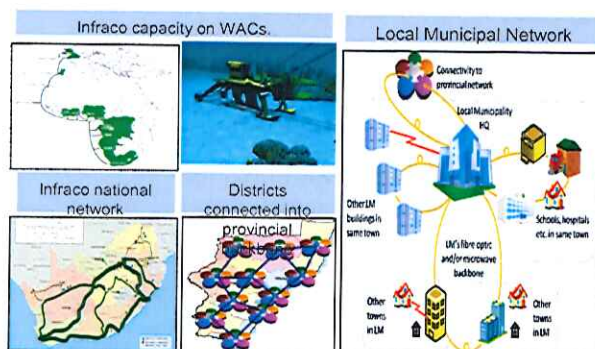


23

Knowledge SIPs

SIP 16: SKA & Meerkat

SKA is a global mega science project, building an advanced radio-telescope facility linked to research infrastructure and high speed ICT capacity & provides an opportunity for Africa and South Africa to contribute towards advance science.



SIP 15: Expanding access to communication technology

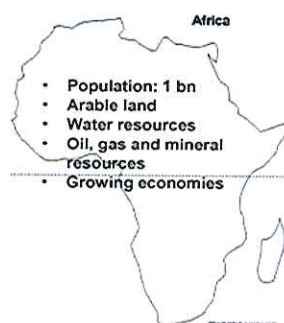
Provide for 100% broadband coverage to all households by 2020 by establishing core Points of Presence (POP's) in district municipalities, extend new Infraco fibre networks across provinces linking districts, establish POP's and fibre connectivity at local level, and further penetrate the network into deep rural areas.

While the private sector will invest in ICT infrastructure for urban and corporate networks, government will co-invest for township and rural access as well as for e-government, school and health connectivity.

The school rollout focus initially on the 125 Dinaledi (science and math focussed) schools and 1525 district schools. Part of digital access to all South Africans includes TV migration nationally from analogue to digital broadcasting.

24

Regional SIPs



Bulk water resources: Lesotho Highlands



Transport: Regional interconnectors



Electricity Transmission: Mozambique (Cesul)



Hydro Power: DRC (Grand Inga), Zambia Lesotho and Mozambique (Mphanda Nkuwa)



SIP 17: Regional Integration for African cooperation and development

Participate in mutually beneficial infrastructure projects to unlock long term socio-economic benefits by partnering with fast growing African economies with projected growth ranging between 3% and 10%.

The projects involving transport, water and energy also provide competitively priced diversified, short, medium to long term options for the South African economy where for example, electricity transmission in Mozambique (Cesul) could assist in provided cheap, clean hydro power in the short term whilst Grand Inga in the DRC is long term.

All these projects complement the Free Trade Area (FTA) to create a market of 600 million people in South, Central and East Africa.

25

18 Strategic Integrated Projects (SIPs)

SIP 1	Unlocking the Northern Mineral Belt with Waterberg as the Catalyst
SIP 2	Durban- Free State– Gauteng Logistics and Industrial Corridor
SIP 3	South Eastern node & corridor development
SIP 4	Unlocking the economic opportunities in North West Province
SIP 5	Saldanha-Northern Cape Development Corridor
SIP 6	Integrated Municipal Infrastructure Project
SIP 7	Integrated Urban Space and Public Transport Programme
SIP 8	Green Energy in support of the South African economy
SIP 9	Electricity Generation to support socio-economic development
SIP 10	Electricity Transmission and Distribution for all
SIP 11	Agro-Logistics and Rural Infrastructure
SIP 12	Revitalisation of public hospitals and other health facilities
SIP 13	National school build programme
SIP 14	Higher Education Infrastructure
SIP 15	Expanding access to communication technology
SIP 16	SKA & MeerKat
SIP 17	Regional Integration for African cooperation and development
SIP 18	Water and Sanitation Infrastructure Master Plan

26

Infrastructure Development Act of 2014

On 30 May 2014, the President assented the Infrastructure Development Act. The act recognises PICC as a statutory body responsible for facilitation and coordination of public infrastructure development

*(English text signed by the President)
(Assented to 30 May 2014)*

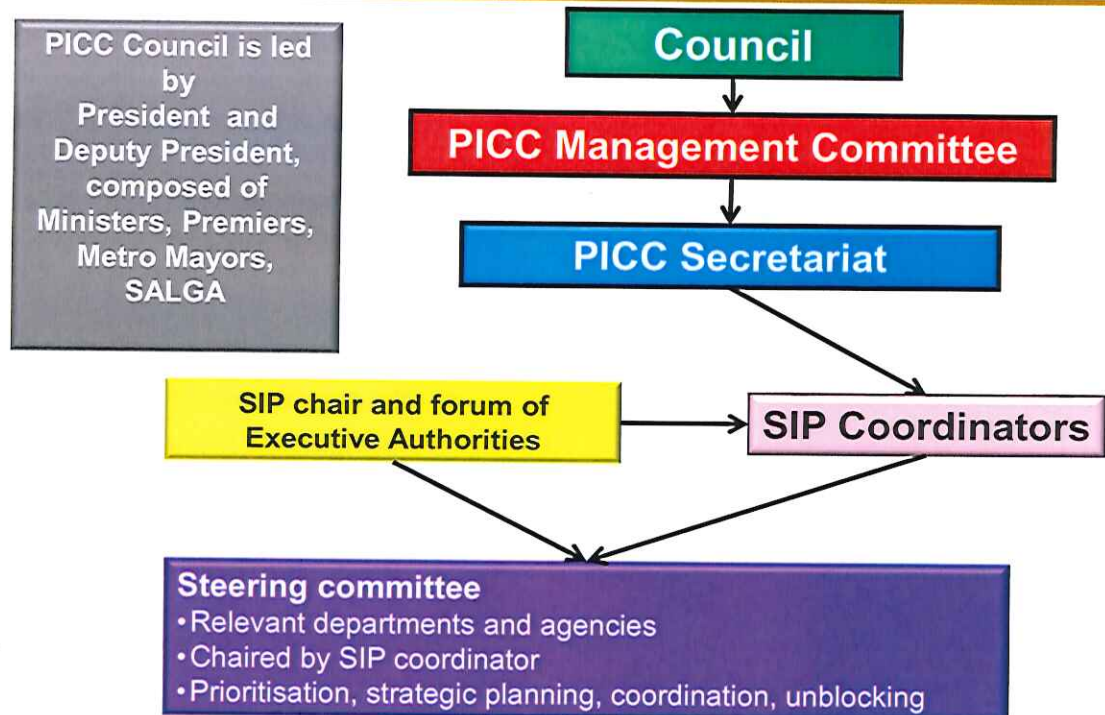
ACT

To provide for the facilitation and co-ordination of public infrastructure development which is of significant economic or social importance to the Republic; to ensure that infrastructure development in the Republic is given priority in planning, approval and implementation; to ensure that the development goals of the state are promoted through infrastructure development; to improve the management of such infrastructure during all life-cycle phases, including planning, approval, implementation and operations; and to provide for matters incidental thereto.

BE IT ENACTED by the Parliament of the Republic of South Africa, as follows:—

27

PICC Governance Structure



28

PICC Focus

PICC's mandate is to support systematic evaluation, planning and monitoring of large projects and its focus includes the objectives outlined below:

- ✓ Identify 5 year priorities
- ✓ Develop 20 year project pipeline
- ✓ Development Objectives: Skills, localisation, empowerment, research & development
- ✓ Expand maintenance: New and existing infrastructure
- ✓ Improve infrastructure links: Rural areas and poorest provinces
- ✓ Address capacity constraints and improve coordination and integration
- ✓ Scale up investment in infrastructure
- ✓ Address impact of prices
- ✓ Support African development and integration

Infrastructure is critical to:

- Promote balanced economic development
- Unlock economic opportunities
- Promote mineral extraction and beneficiation
- Address socio-economic needs
- Promote job creation
- Help integrate human settlements and economic development

Overall approach:

- An Infrastructure Book was compiled, which contained more than 300 infrastructure projects across the country
- An Infrastructure Plan with identified Strategic Integrated Projects (SIPs) was developed and adopted by Cabinet and the PICC

29

The role of the PICC

What is PICC?

- Executive's tool for **monitoring** the implementation and impact of infrastructure on the economy.
- A **planning and coordinating** body.

What the PICC is **NOT**

- Not a funding structure or bank
- Not the accounting authority for the spending of money or control of the build-programme
- Not an implementing agent.

30

Drawing lessons from our experience

- Analysis of the 2010 World Cup build-programme and subsequent infrastructure projects
- Problems of planning and integration
- Silos and spheres of government
- Need for pipelines of materials and skills
- Importance of ensuring local procurement in the design of projects and tender specifications, as well as monitoring and follow-ups
- Technical project management skills in the public sector

31

Part 2

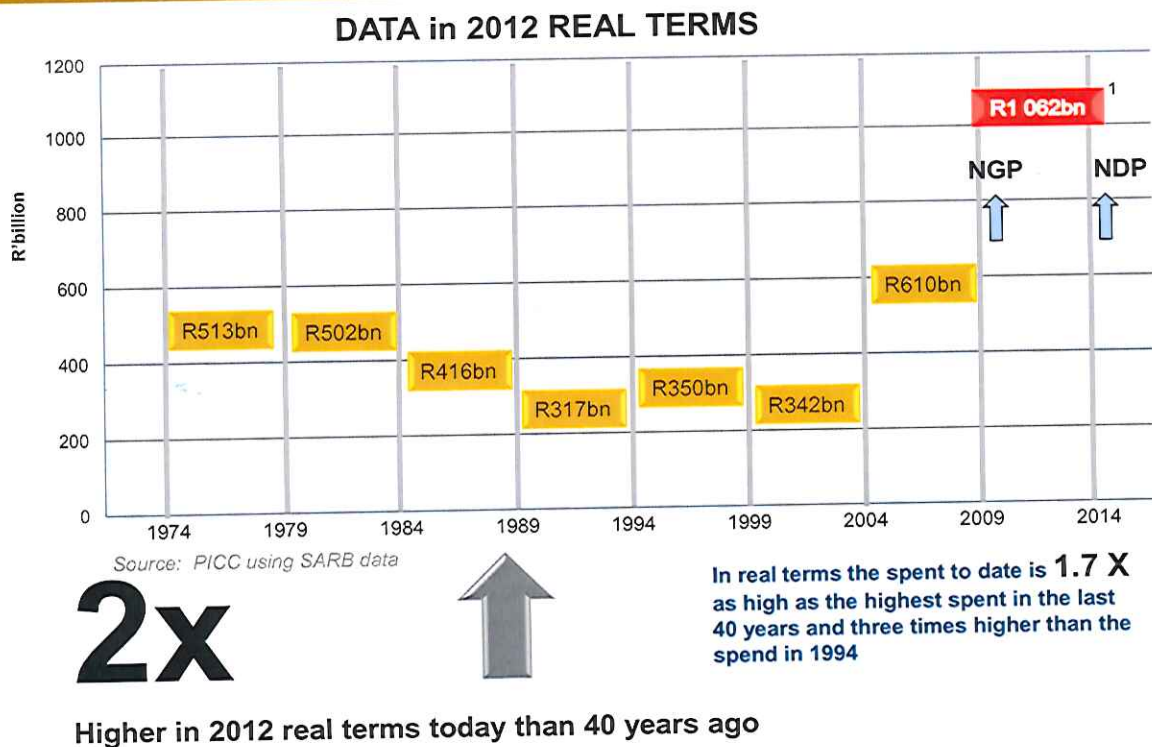
The Work of the PICC

32

Progress Report

33

Infrastructure spend over the last 40 years



34

Economic Impact of Infrastructure Spending

- Investment in public infrastructure has grown since 2008, following a period of under-investment
- The **increase** in infrastructure-spending alone since 2008 has **boosted** real GDP by **2.2%** by 2016 (cumulative effect), amounting to **R95 billion**
- Commodity price plunge contributed to recessionary conditions in the economies of Nigeria, Russia and Brazil. Without the increased infrastructure investment, **the South African economy is likely to have gone into a recession in 2015**
- The multiplier effect of infrastructure spend in the economy over the next three years is estimated at about **R302 billion annually** in 2017 prices.

Source: IDC economic modeling of infrastructure (incl broadband) spend

35

Employment Impact of Infrastructure Spending

THE CHALLENGE: How to help absorb large numbers of new entrants - comparing 1996 and 2017 to illustrate the challenge

In 21 years:

- Population grew by **39%**
- Working age population (15-64 yrs) grew by **49%**
- Employment (number of jobs) grew by **77%** **7,4 million new jobs**

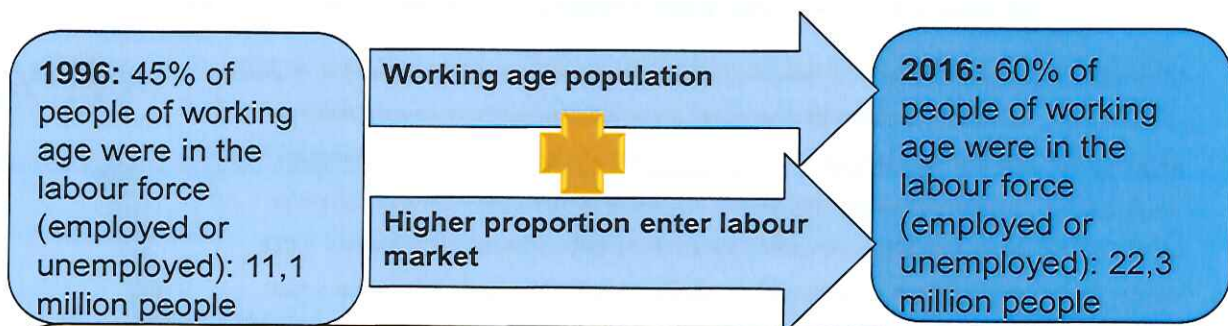
BUT the size of the labour-force grew by **99%**

RESULTING in **4 million more people unemployed**

THUS, an ever-increasing proportion of people aged between 15 - 64 are looking for work every year.

36

The South African Jobs Challenge



Based on actual current jobs in the economy AND had the labour force grown at the same rate as

- Population growth (39%), the size of the labour force would be 15,6 million, resulting in a zero unemployment rate (actually a shortage of labour of half a million workers)
- the working age population (49%), the size of the labour force would be 16,8 million, resulting in an unemployment rate of 4%.

In reality, this is not the case. What this points to is that job-creation needs to exceed population growth significantly to keep unemployment rates at the same rate or to decrease them, because a greater proportion of people who previously did not look for work, are now entering the labour market.

Where are the Job Gains since 2014?

An increase of **1 005 000** primarily in the following areas:

GAINS

Construction	214 000
Business Services, including Finance	384 000
Agriculture	166 000
Manufacturing	55 000
Government	29 000

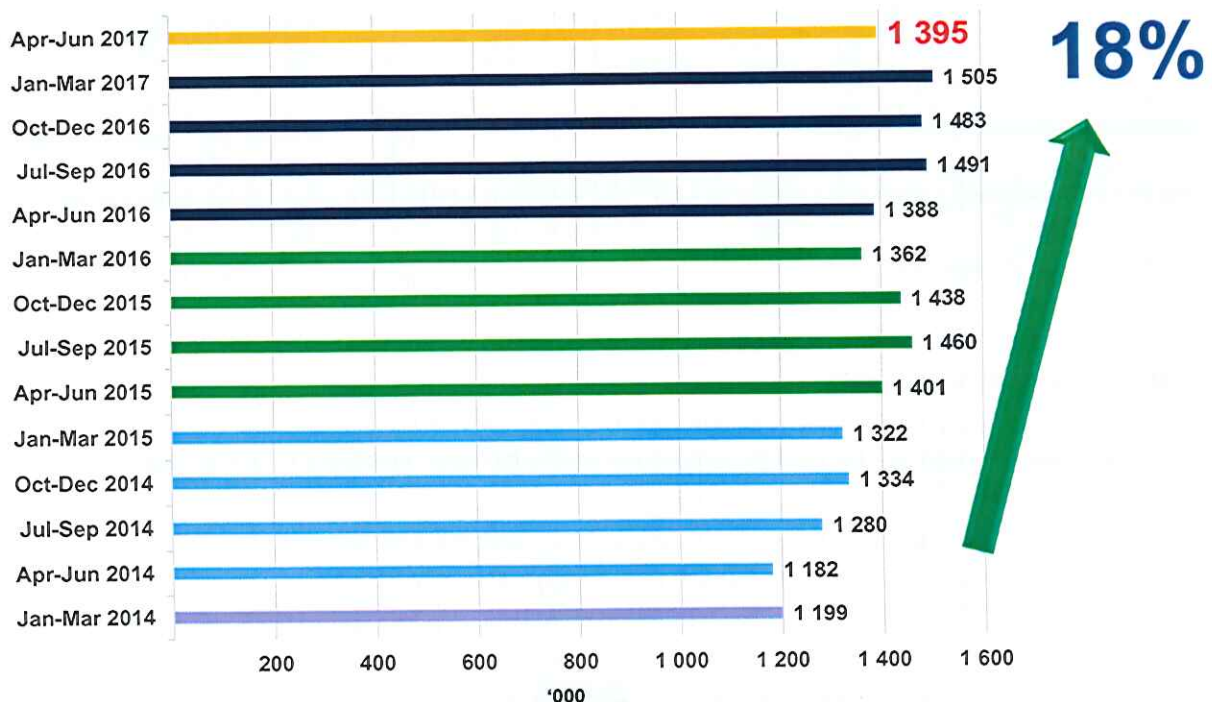
BUT note: 110 000 decrease in Construction jobs (between end March 2017 and end June 2017)

Source: Quarterly Labour Force Survey, June 2017

38

1.4 MILLION CONSTRUCTION JOBS

Increase of **214 000** construction jobs since April 2014



Source: Quarterly Labour Force Survey, June 2017

Driving Industrialisation and Transformation

1 Black construction companies (Construction Transformation)

- Driving transformation, by a minimum sale of 45% of shares to black South Africans or through partnerships with smaller black-owned construction companies, to enable them to increase their turnover to 25% of the listed company turnover.

2 Black industrialists

- The value of **funding** for black-empowered and black-owned companies **increased by 103%** to R 10.1 billion.

3 Local procurement

- From 2012, the state began to designate products that should be purchased locally by all public entities.
- Imports accounts for an estimated 17% of public sector capex spend for the next three years, or R59 bn per annum. A 10% reduction in import value can stimulate local manufacturing by R5,3 billion.
- The challenge is in two areas: Ensuring that public entities actually comply with the regulations and limiting the number of exemptions that are granted.

4. New factories

- A number of **new factories** manufacturing infrastructure components or rolling stock were opened or expanded in the past three years.
- This included green energy components, buses/taxis/trucks and agri-processing plants. The slides that follow contain further information.

40

Strengthening black construction companies

PAST 3 YEARS:

Transformation and settlement package signed with **7** largest construction companies, comprising:

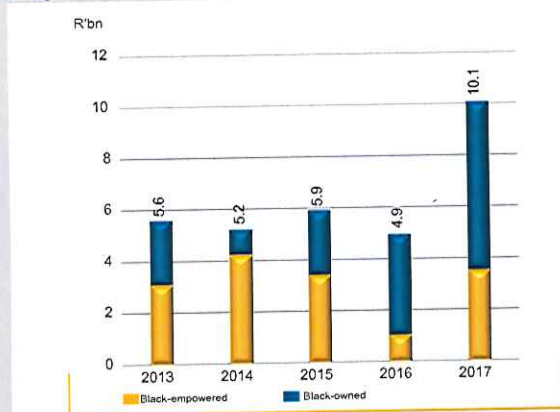
- Reparation package of **R1.5bn** over 12 years to support skills development, social projects and financial support to black emerging construction Companies **plus R1,4bn** in fines
AND
- **4** Companies selling at least 45% of their shares to black companies
- **3** Companies will empower 7 black emerging contractors over 7 years, to 25% of their turnover

Steel producer AMSA fined **R1.5bn** with commitment to invest **R4.6 bn** in plant upgrades and save jobs

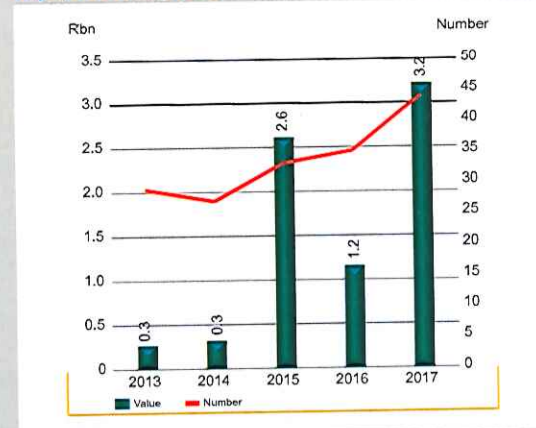
41

Black Industrialist Programme

Value of funding for black-empowered and black-owned companies



Value approved and number of approvals for women-empowered enterprises



- **Looking forward:** Over the next 3 years, **R 23.5 Billion** to support black industrialists of which R3.1 billion will be to black women, R7.8 billion to fund women-empowered businesses and R5.2 billion for youth-empowered businesses.
- The dti has allocated **R 1.5 billion** to support black industrialists, totaling (IDC and dti) **R 25 billion**.
- The **value of funding** for black-empowered and black-owned companies **increased by 103% to R10.1 billion** (2016:R4.9 billion).
- Significant improvement in **approvals for women-empowered businesses at R3.2 billion**. This amount is three times the value of R1.1 billion approved in 2016.

42

Local procurement - designation

Designated sector/ product	Minimum threshold for local content
Buses (bus bodies)	80%
Steel power pylons	100%
Rail rolling stock <ul style="list-style-type: none"> • Diesel locomotives • Electric locomotives • Electric multiple units • Wagons 	65%
Set Top Boxes (STB)	30%
Solar water heater components	70%
Electrical and telecom cables	90%
Valves products and actuators	70%
Residential electricity meter <ul style="list-style-type: none"> • Prepaid electricity meters • Post paid electricity meters • SMART meters 	70% 70% 50%
Working Vessels / Boats (all types) <ul style="list-style-type: none"> • Components 	60% 10% - 100%

Designated sector/ product	Minimum threshold for local content
Transformers & Shunt Reactors <ul style="list-style-type: none"> • Class 0 • Classes 1 & 2 • Class 3 • Class 4 • Components & conversion activities 	90% 70% 45% 10% 50% - 100%
Solar PV Components <ul style="list-style-type: none"> • Laminated PV Modules • Module Frame & DC Combiner Boxes • Mounting Structure • Inverter 	15% 65% 90% 40%
Two-way Radio Terminals & Associated Equipment <ul style="list-style-type: none"> • Portable radio, mobile radio, repeater) • Components 	60% 20% - 100%
Rail signalling <ul style="list-style-type: none"> • Components 	65% 40% - 100%

MINIMUM LOCAL CONTENT FOR PRIMARY STEEL PRODUCTS	Local content threshold
Steel Construction material	
Plates, Sheets, Galvanised and colour coated coils, wire rod and draw wire, sections, reinforcing bars	100%

MINIMUM LOCAL CONTENT FOR STEEL VALUE ADDED PRODUCTS	Local content threshold
Fabricated Structural Steel, Joining/Connecting Components, Frames, Fasteners, Wire Products, Ducting and Structural Pipework, Gutters, downpipes and launders	100%

Factories – examples since 2014

Grindrod expanded their locomotive refurbishing capacity in **PRETORIA**

Manufacturer of Solar PV panels **BUFFALO CITY, EC**

Foreign investor, FAW opening a large truck factory in **COEGA, EC**

Jinko Solar opening a factory to assemble and laminate solar panels in **EPPING**

Iveco opened a truck and bus plant in **PRETORIA, GAUTENG**

Gestamp opened a wind tower plant in **ATLANTIS, WC**

ADC cable manufacturing factory in **KEMPTON PARK, GAUTENG**

Busmark expanded operations in **BLACKHEATH** to supply buses to municipalities

Toyota Minibus Taxi Manufacturer in **DURBAN, KZN**

44

Monitoring Implementation

- The PICC monitors more than 300 projects across the 18 SIPs
- The level of information covers areas from economic data (such as job numbers) to project development and spending trends
- Dashboards provide a standardised method of presenting in-depth data in a readable format
- This enables:
 - Problems to be identified
 - Cabinet to monitor progress
 - Departments and SOCs to resolve blockages, plan and coordinate

45

Case study: energy

The following slides show the example of work done by the PICC on energy, drawing on information analysis, identifying challenges and enabling long-term planning

46

Energy that transforms lives...

The **first municipal electricity** in South Africa was provided in about **1892**.

Between 1890 and the onset of democracy in **1996** (census year), **5.2 million households** were **connected** to the electricity grid.

Since 1996, a further **9 million households** were **connected** to the grid.

In less than 20 years of the democracy, more people were able to access electricity than in the previous 104 years of colonialism.

TOTAL NEW ENERGY ADDED TO GRID

17 621_{MW}

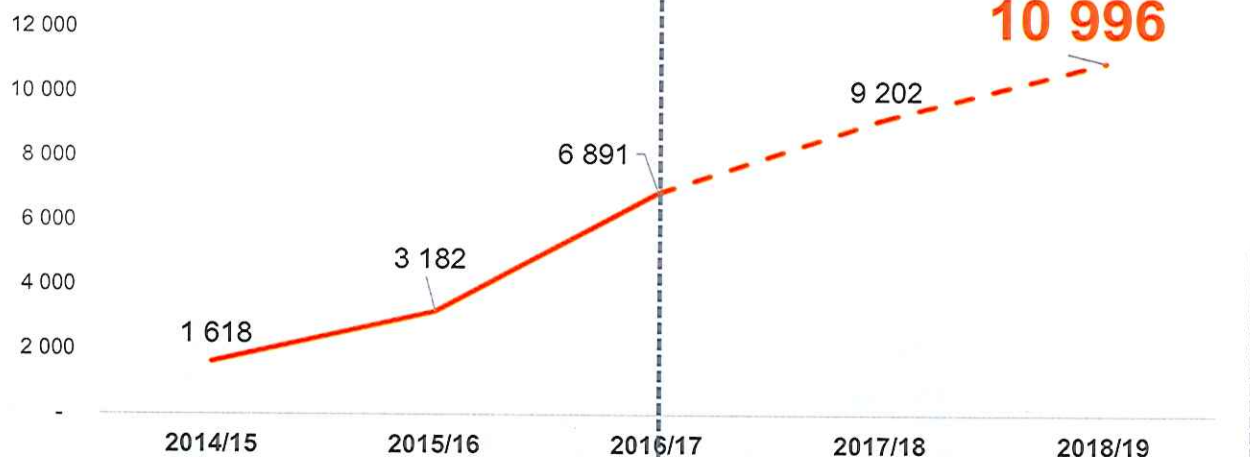
MTSF
TARGET

CURRENT
ADMINISTRATION

62%

PREVIOUS
ADMINISTRATION

1 874MW



48

NEW ENERGY: ESKOM BUILD

10 896_{MW}

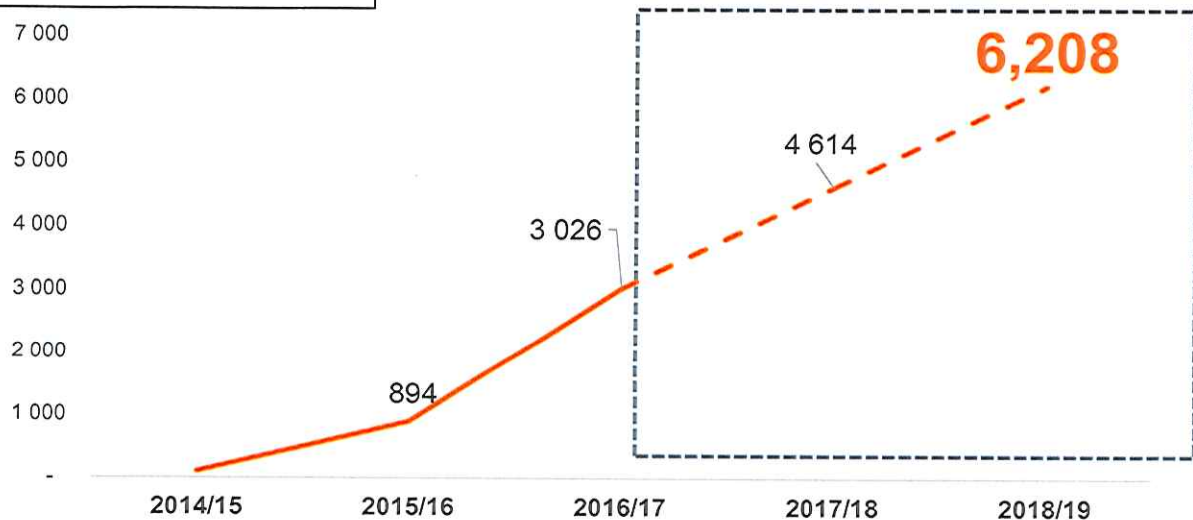
MTSF
TARGET

CURRENT
ADMINISTRATION

57%

PREVIOUS
ADMINISTRATION

1 683MW



49

Total Energy Build

By the end of this administration, **6 336 MW** of usable energy is projected to be added to the grid from **10 996 MW** generated.

Equivalent to
Majuba, Arnot and
Grootvlei power
stations



OR

3 Koeberg Power Stations



Subject to two additional units at Medupi coming on-grid during 2018, as is projected currently

NEW ENERGY: GREEN ENERGY

6 725MW

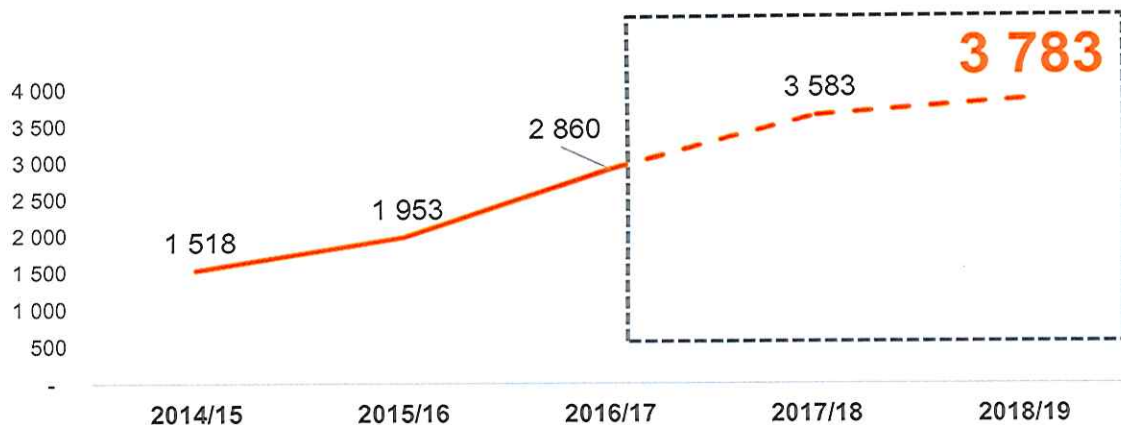
ADMINISTRATION
TARGET

CURRENT
ADMINISTRATION

56%

PREVIOUS
ADMINISTRATION

191 MW



TRANSMISSION LINES

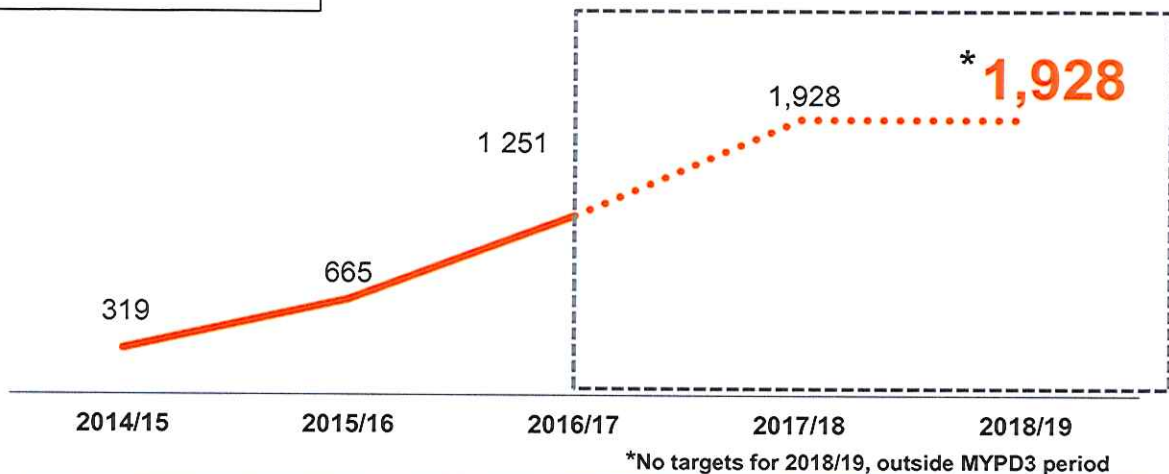
2 574km's
MTSF
TARGET

CURRENT
ADMINISTRATION

75%

PREVIOUS
ADMINISTRATION

3 200 km's

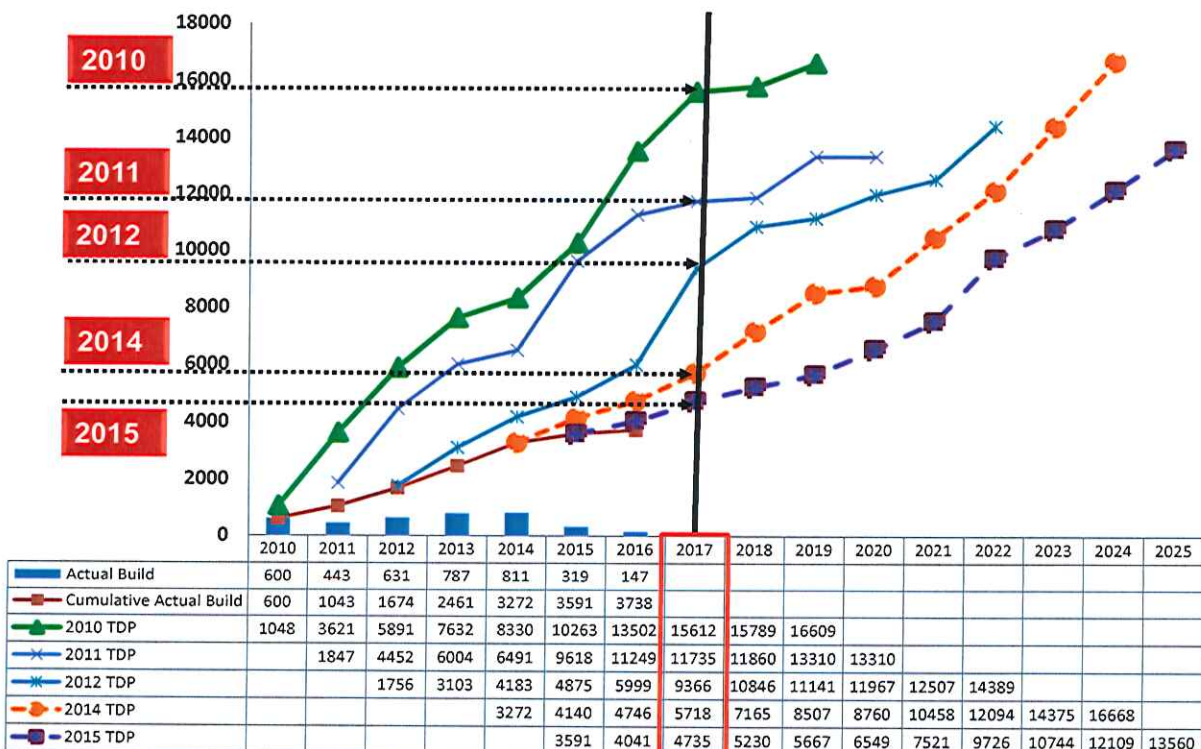


At the current rate of 470 km/annum, it will take **22** years to roll out the "10" year plan

52

10-Year Transmission Development Plan

Annual adjustments downwards (km per annum)



Source: Eskom 2010 TDP, Eskom 2011 TDP, Eskom 2012 TDP, Eskom 2014 TDP, Eskom 2015 TDP and SIP 9 Construction Update

53

HOUSEHOLD CONNECTIONS

1 600 000

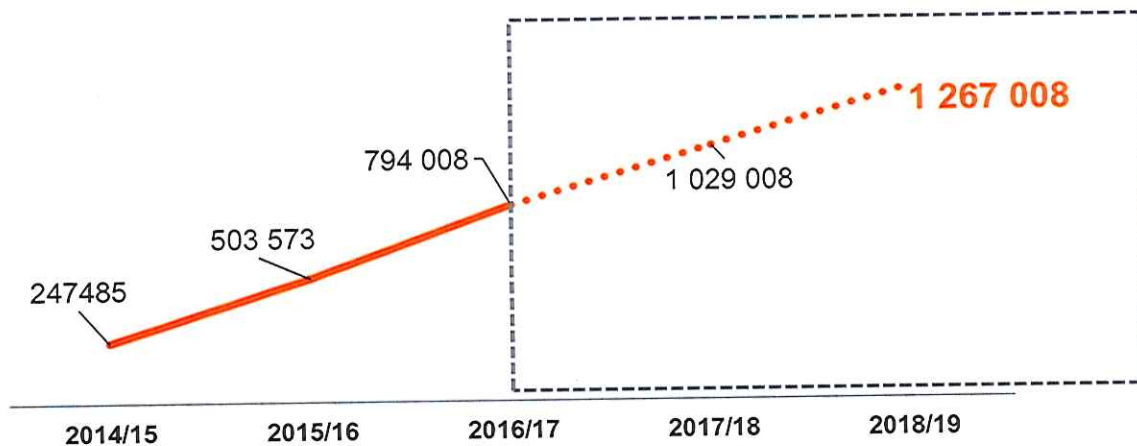
ADMINISTRATION
TARGET

PREVIOUS
ADMINISTRATION

79%

PREVIOUS
ADMINISTRATION

1 022 419



54

Case study: cable and metal theft

The following slides show the example of work done by the PICC on cable and metal theft in public infrastructure

55

Report on Cable and Metal Theft

According to the City of Joburg, approximately **45%** of power outages in the areas where City Power operate are caused by **cable theft**.

- Cable and metal theft causes **SERIOUS ECONOMIC HARM** and **DISRUPTS SERVICES TO COMMUNITIES**
- Theft was treated as **PETTY OFFENSE** receiving minimal sentences and poor monitoring of scrap metal dealers

Report on Cable and Metal Theft

NEW LEGISLATION SIGNED INTO LAW IN DECEMBER 2015

- New offense created: theft from public infrastructure
- Introduce minimum sentencing
- Making it more difficult to obtain bail
- **Burden of proof to be shifted to possessor of copper cable**

Legislative measures implemented

TWO LAWS AMENDED

1. Criminal Law Amendment Act:
 - Introduce class of essential infrastructure offenses
 - Minimum sentencing regimes
2. Criminal Procedures Act:
 - Tougher bail conditions

Additional steps being considered:

- Second-hand Goods Act
 - Restrictions on trade or export of scrap metal
-

58

Extension of Powers

Extension of the powers of the officers of Peace and other law enforcement agencies granted in terms of the Second-Hand Goods Act was gazetted on 14 Feb 2017:

- **Authority to do routine inspections** and enter the premises of registered dealers in order to investigate compliance with the act;
 - It also gives them **authority to enter and conduct searches and seizures, and seal off premises** at which second-hand goods are found in order to prevent a person from conducting business in contravention of the act; and
 - In addition, law enforcement officers will now have the **power to execute warrants** on properties.
 - It is being piloted in Cape Town and will be rolled out to other cities.
-

59

Trade measures

The Minister of Economic Development gazetted a Trade Policy Directive in 2013 to place controls on export of scrap metal.

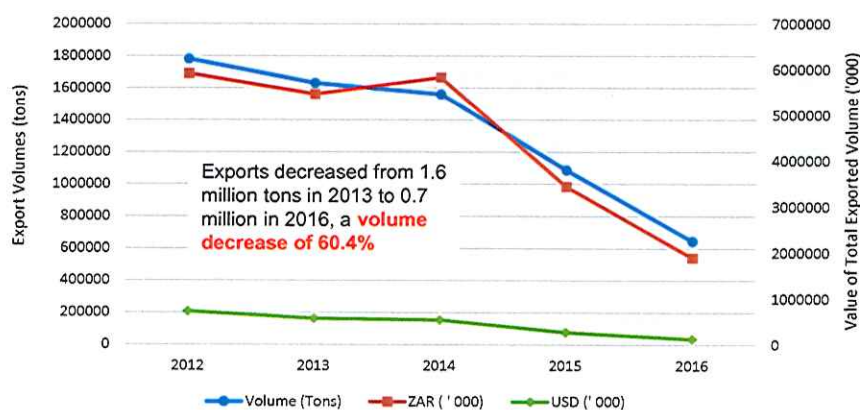
While this was aimed at addressing supplies of metal to the domestic manufacturing industry as part of the National Infrastructure Plan as well as reducing carbon emissions and energy use (which would be the case if iron-ore was used instead), **it assists in reducing the market demand for scrap metal** which has fuelled the large-scale theft of metal and cables.

The regulations have been challenged in court by the exporters, the results of which are set out below.

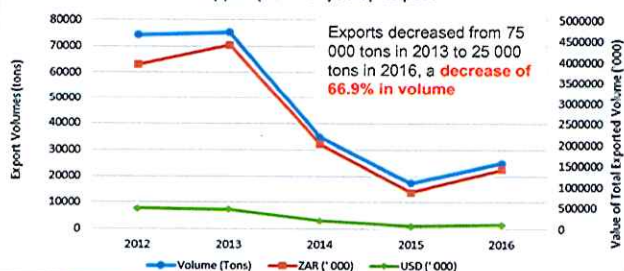
60

Report on Cable and Metal Theft

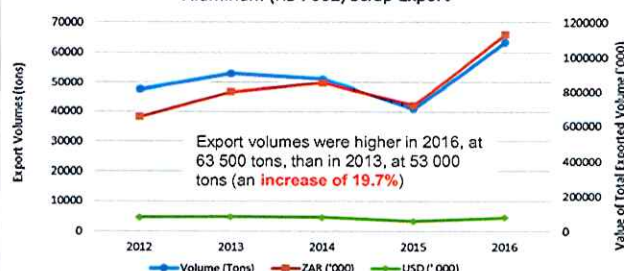
Ferro Alloys (HS 7204) Scrap Export



Copper (HS 7404) Scrap Export



Aluminum (HS 7602) Scrap Export



New Challenges – illustrating the role of the PICC

62

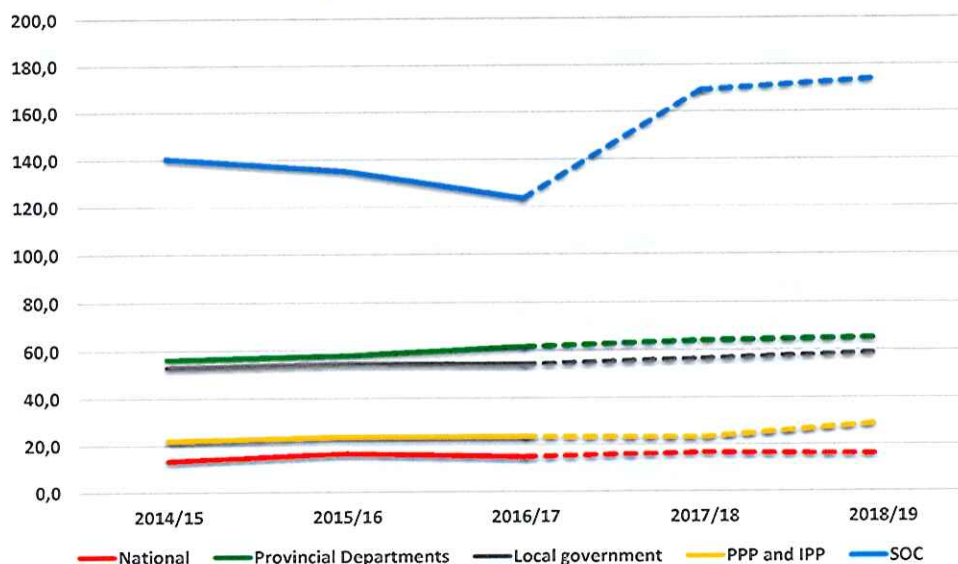
LOWER INFRASTRUCTURE SPENDING (nominal)

R1.5 TRN

INVESTMENT IN INFRASTRUCTURE

1 Apr 2014 to 31 Mar 2019

R'bn



63

The Urbanisation Challenge

- The **rate of urbanisation** or movement of people into urban areas or cities, across the country led to a growth of new households by **3.7%** on average annually over the past 6 years, or put differently: more than **375 000 new households** were added to cities each year.
- In rural areas the challenge: backlogs.
- In urban areas the challenge: backlogs **PLUS** massive increase in population.
- The work of the PICC shows the impact on addressing backlogs in housing, access to reliable water supply and electricity. This should be factored into our delivery plan in the medium term.

64

Water Challenge

Water shortages are due to planning and climate challenges.

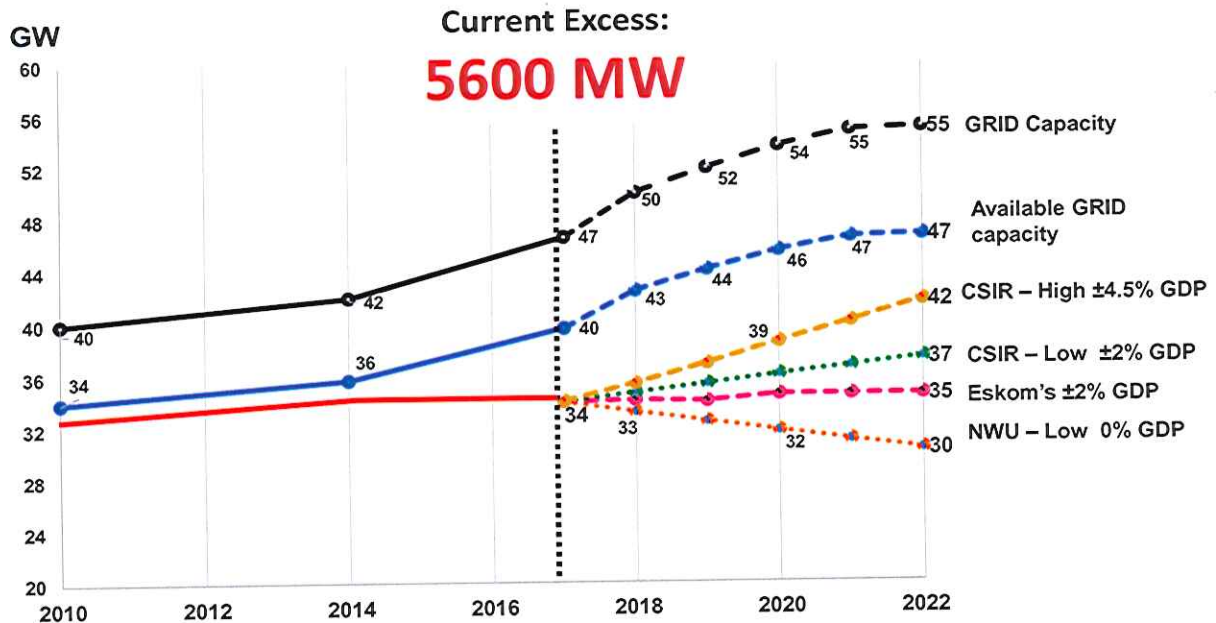
However:

- Without water, other infrastructure projects will be held up due to lack of water supply.
- Gauteng is vulnerable to weak rainfall in the **next 10 years** because water from Lesotho will only be delivered by **2025**.
- This is the case even if our dams are full.

This may thus affect our capacity to use infrastructure as an anchor for economic recovery.

65

Energy Use



DISCLAIMER: The PICC has not verified the underlying technical work that projects an energy surplus, but simply reflects current projections.

66

Leakage: Cost Overruns - Global Lessons

According to an international study conducted by Flyvbjerg, Holm and Buhl, cost overruns are a **global phenomenon** and **have not improved over the last 70 years** since learning are not taken into account!

1. Sampled transportation infrastructure in 20 countries on 5 continents - 9 out of 10 projects in the had cost overruns **90%**
2. Rail projects – **45%** higher than original estimates
3. Tunnels and Bridges – **34%** higher
4. Roads – **20%** higher
5. Cost overruns more severe in developing countries
6. Transportation infrastructure is not more pronounced than other infrastructure

The lesson from this is clear: unless government prioritised planning, monitoring and effective implementation, project costs will invariably be higher than budgeted, with significant challenges for the national fiscus or for the cost of the user-fees.

67

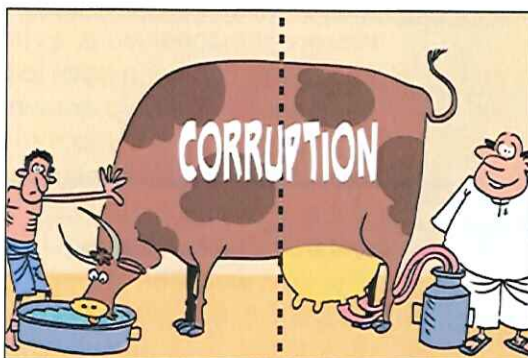
Work being undertaken on

- Cost over-runs in major infrastructure projects
- Use of imported components and materials
- Corruption and its impact on infrastructure
- Disruptions at construction sites through protests

These will be reported on to the Committee periodically

68

LEAKAGE: CORRUPTION



Less jobs ...

Negative fiscal impact ...

Dampen economic stimulus ...

Delay project implementation ...

CORRUPTION can seriously erode the impact of additional spending on infrastructure as well as the state's ability to raise funding for new projects.

Economic modelling shows that a **10%** overpayment due to corruption or tender rigging can lead to a **R27bn LOSS IN GDP ANNUALLY** & an economy wide loss of **76 000** jobs

69

ASSET MANAGEMENT (Maintenance)

2007: Establishment of the Government Immovable Asset Management Act (GIAMA)

SAICE 2017 INFRASTRUCTURE REPORT CARD FOR SOUTH AFRICA:

26 sub-sectors were assessed. This typically includes water, sanitation, roads, airports and ports.

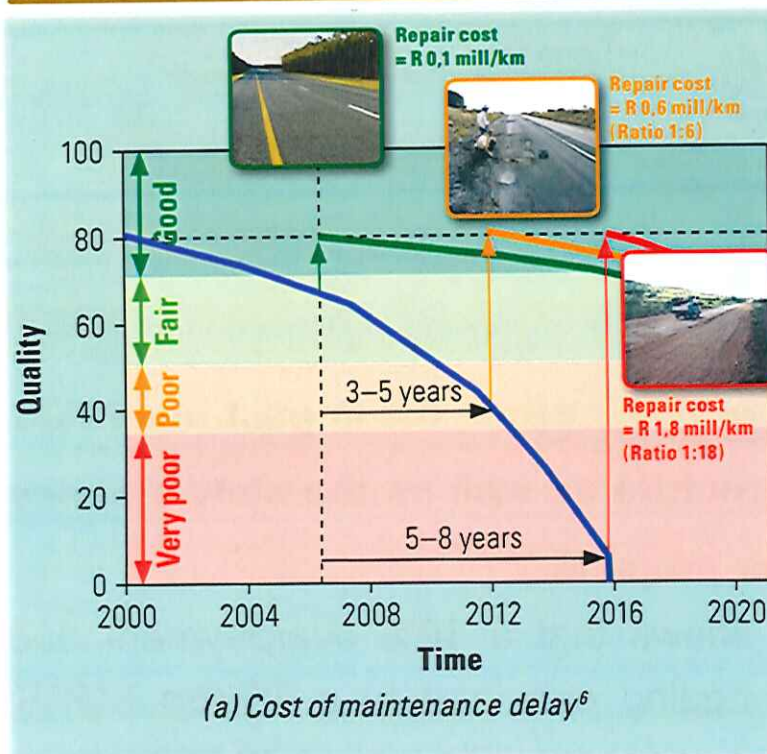
Outcome: One has shown improvement, the grading for 20 sub-sectors have remained the same and five have dropped by one grade.

Impacts of Poor maintenance:

- Service delivery Protests
- Financial losses
- Limits growth: lack of reliable infrastructure limits business and job opportunities
- The cost of accumulation of maintenance backlogs

70

Asset Management (Maintenance)



It illustrates that the **cost to restore** the condition of a road from a fair condition back to a good condition would amount to R 0,1mill/km. If the same road is allowed to deteriorate to a poor condition the cost to restore it back to a good condition would be R 0,6mill/km. **If however no maintenance is done** and the road is allowed to deteriorate to a very poor condition the cost of restoration back to a good condition would amount to R 1,8mill/km. In practice the figures imply that essential maintenance of a road that is delayed for 5 to 8 years is estimated to **increase the real cost of maintenance by a factor of 18!**

...Asset Management (Maintenance)

- Despite the adoption of legal statutes and tools to assist Government in conducting maintenance, major gaps still exist;
- Priority is in response to demand for new infrastructure, rather than maintenance of existing assets;
- A general lack of the adoption of asset management systems;
- Lack of life cycle costing analysis during project development;
- Lack of technical skills in rural municipalities;

**Ring-fencing of funding for maintenance
(maintenance fund?)**

72

Actions

- Increasing the **spending trend-line**, through work with National Treasury, new Budget facility and unblocking new project pipeline. Key is to recognise the **counter-cyclical role** of infrastructure investment to boost growth
- Urbanisation challenge points to the importance of **better use of our planning** framework. COGTA will present initial work by PICC.
- **Water-build**: this can be the focus of future presentation to Committee
- Energy-build: further work is being done on **energy-use projections**
- Leakages, including corruption, over-spending and imports: **measures are being identified to address these**, to be reported to Committee
- Maintenance: monitoring of spending and **ring-fenced funding** (conditional grants) to be considered by oversight committees to strengthen efforts within the Executive to focus on maintenance of existing infrastructure

21 Priority Projects

WATER: 7 PROJECTS

- Mokolo Crocodile Water Augmentation Project, Phase 2
- Lesotho Highland Water Projects, Phase 2
- Long term acid mine drainage solution
- Olifants River Water Resources Development Project: Phase 2D
- Vaal Gamagara water supply scheme
- Clanwilliam Dam
- Mzimvubu Scheme

ENERGY: 5 PROJECTS

- 1 500MW coal IPP
- Eskom's transmission build
- Solar Water Heaters
- Household electrification
- Refurbish municipal distribution system

HIGHER EDUCATION: 2 INFRASTRUCTURE PROJECTS

- Student accommodation
- 2 New Universities

TRANSPORT: 3 LOGISTICS PROJECTS

- N3 Highway
- N2 Wildcoast
- Moloto Corridor

HEALTH: 4 INFRASTRUCTURE PROJECTS

- King Edward VIII
- Limpopo Academic
- George Mukhari Academic
- Nelson Mandela Hospital

74



Construction of the R61- Umthatha to Ngeleni
(Umthatha, Eastern Cape), 30 January 2017

75

PRASA, Station Modernisation, Gauteng, 2016



Dr Pixley ka Isaka Seme Memorial Region Hospital, eThekweni, KZN, Jan 17



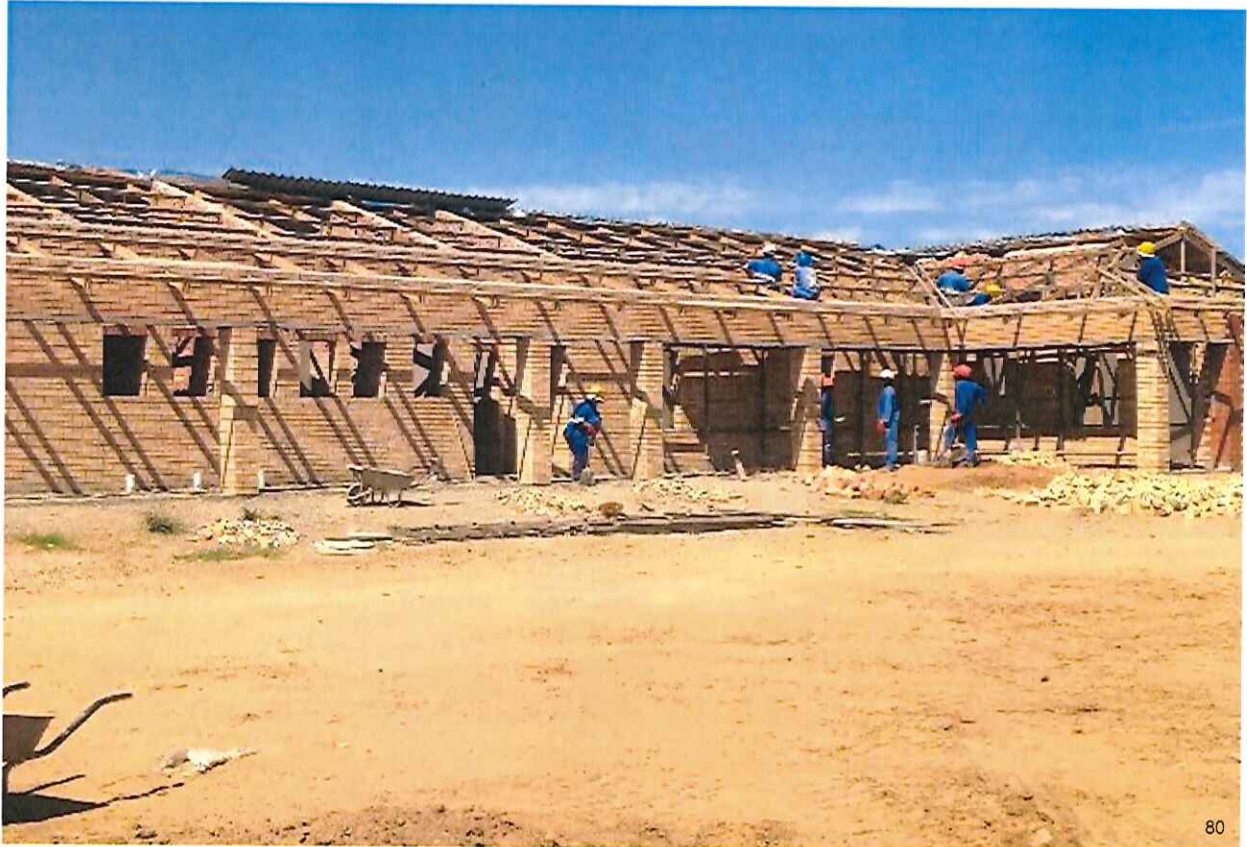
Construction of new runway, taxiways, apron & associated electrical works at Somerset East Airfield



Medupi Power Station, Lephalale, Limpopo, Jan 17



Grassland School, Mangaung, Free State, Jan 17



!Xina Solar, Pofadder, Northern Cape, Sept 16



Fibre Network Roll-out, Umlazi Township, Durban, Jan 17



Student Accommodation, Fort Hare, Eastern Cape, Jan 17



Bhekizulu Senior Secondary School, Libode, Eastern Cape, Jan 2017



Limpopo Public Works, Roads & Infrastructure Household Contractors Programme, Bolobedu South, Limpopo, Jan 17



MASSIFYING JOBS ON INFRASTRUCTURE

Road construction and maintenance provide an immediate and high-impact opportunity to scale up employment and provide incomes to households. **The PICC is identifying ways of massifying infrastructure impacts.** Initial work has been done on a possible expansion of the successful Zibambele road-maintenance model in KZN which employs more than 40 000 people in rural areas, mainly persons from women-headed households.

E Cape has a similar programme in place.

The opportunity exists to replicate this across the country and expand it, so that we address two challenges simultaneously:

- Improved maintenance and
- greater job creation.

86

...financing system: multi-year appropriations

Cabinet received a report during 2016 that set out new thinking on multi-year budgeting on infrastructure.

It set out the arguments for a new budget allocation system that provides for multi-year allocations for infrastructure projects, in order to enhance planning, provide certainty of funding, enable smoother implementation and cost-savings whilst ensuring parliamentary oversight.

Various options were considered and are in the process of being finalised.

87

...funding: PIC, MTBPS announcement

- The 2016 MTBPS reported a planned infrastructure spend of more than **R900 billion over the next three years**.
- A new facility has been introduced by National Treasury, the Budget Facility for Infrastructure to provide feedback and fast-track consideration of large infrastructure bids.
- **Telkom** has a planned R16bn spending over the next three years; and private sector telecoms companies plan to spend an additional R33bn over the period.
- Discussions with the potential funders are being undertaken, including on a possible facility to improve private sector participation.

88

...project management capacity

- During 2016, Cabinet mandated the PICC to establish a Technical Project Management Unit (TPMU)
- Initial modest funding for the Unit will be provided in the 2017/18 Budget
- A core team is being put in place between April and June 2017 that can assist with project evaluation, cost-saving measures, improved development outcomes and financial packaging

89

...integration and coordination

9 of the 18 SIPs improved coordination between the spheres in the State, business, labour and communities, to unblock the project pipeline.

- 4 of the geographic-SIPs (**1, 2, 3 and 5**) entailed extensive community and business engagement in Limpopo, Eastern Cape, Western Cape and the transport corridor between Joburg and Durban.
- The alignment in the **2** energy-SIPs (**9 and 10**) has resulted in a key focus in, not just new electricity generation, but also the provision of electricity to households and the building of transmission lines

90

...private sector participation

- The private sector is currently involved in infrastructure in the following key areas:
 - **Energy: renewables, gas and coal**
 - **Telecoms: mobile and fixed-lines**
 - **Hospitals**
 - **Private schooling and colleges**
 - **Road building and maintenance**
- Work is being undertaken to assess the best ways to involve the private sector in infrastructure, including identifying which projects are best done through the state, the private sector or a combination.

91

Part 3

Conclusion

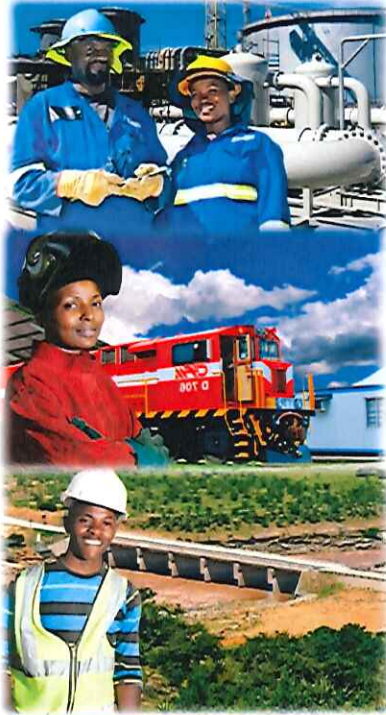
92

Conclusion

- Infrastructure programmes are multi-year and generally go beyond the term of one administration
 - Execution of all phases need to be improved to ensure the full benefits of infrastructure investment is felt by communities and in the economy
 - The National Infrastructure Plan is a basis for focussed implementation for the remaining term of this Administration (to 2019) and by the next Administration (2019-2024)
 - Roles of Portfolio Committees? Accountability of the line department or state-owned company with accounting responsibility; focus on maintenance.
 - Role of Standing Committee on Appropriations? Spending trend-lines could be taken up. Ring-fencing of maintenance spending.
 - The Economic Cluster Committees? Could receive reports on the overall progress with implementation and on the work-focus of the PICC.
-

93

Empowering a Nation, triggering development



- The Infrastructure Plan is a bold effort to transform the economy, laying the basis for growth and jobs
- The Plan is an opportunity to mobilise the nation behind a common vision and requires partnerships with business, labour and communities
- Aimed at promoting:
 - Re-industrialisation through manufacturing on inputs, components and machinery
 - Skills development aimed at critical categories
 - Greening the economy
 - Empowerment