

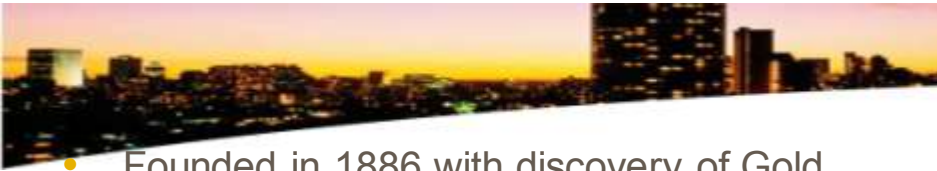


City Power Revenue Protection Malope Ramagaga

29 July 2010



City of Johannesburg



- Founded in 1886 with discovery of Gold
- Occupies 1 644km² area
- Population of 3,2 million
 - 42% of it been youth
 - 22% increase in population
 - 39% increase in household



- In 2000 Johannesburg become a Metro with amalgamation with Sandton, Alexandra, Orange Farm & Johannesburg



1886



There was a need to expand Electricity infrastructure to support growth!

1950



2009





City Power



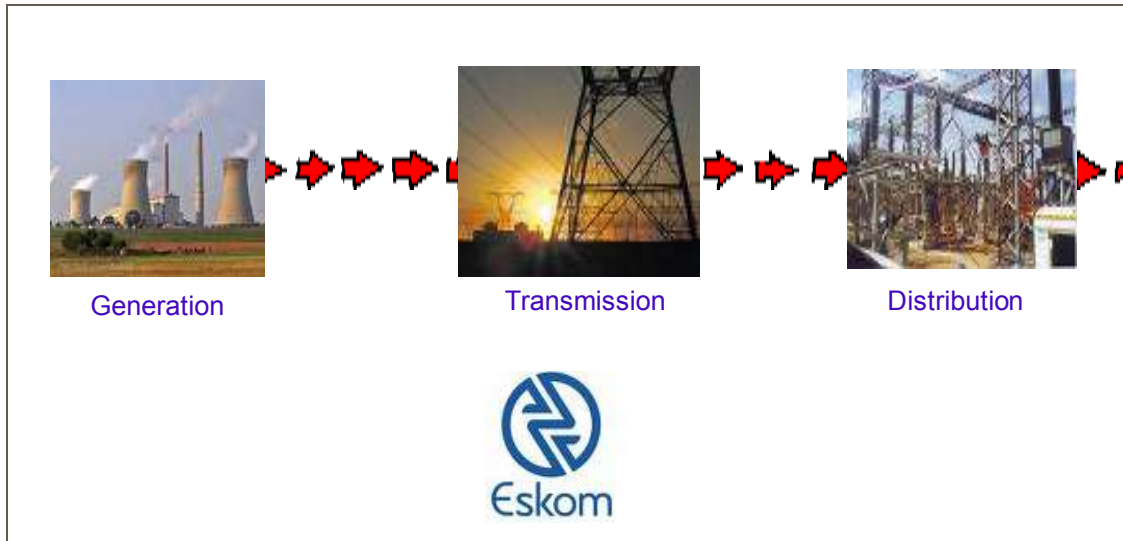
- In 2000 City Power was created
 - First ring-fenced electricity utility in SA
 - 2001 City Power Board appointed
 - March 2001 City Power CEO appointed
 - April 2001 City Power company started operating
 - By August 2001 all executive positions were filled
 - By October 2001 all senior management position were filled



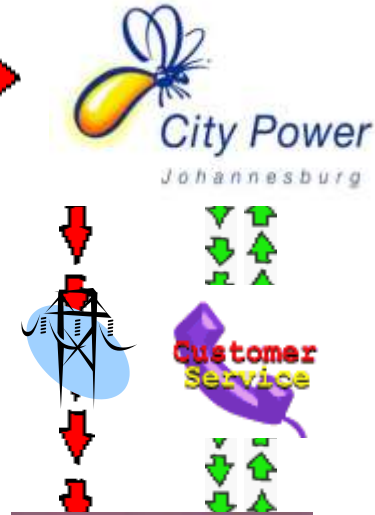
Our business



National Energy Regulator (NERSA)



Kelvin



We are in the business of buying electricity from a source and selling it to electricity customers, making a profit from this

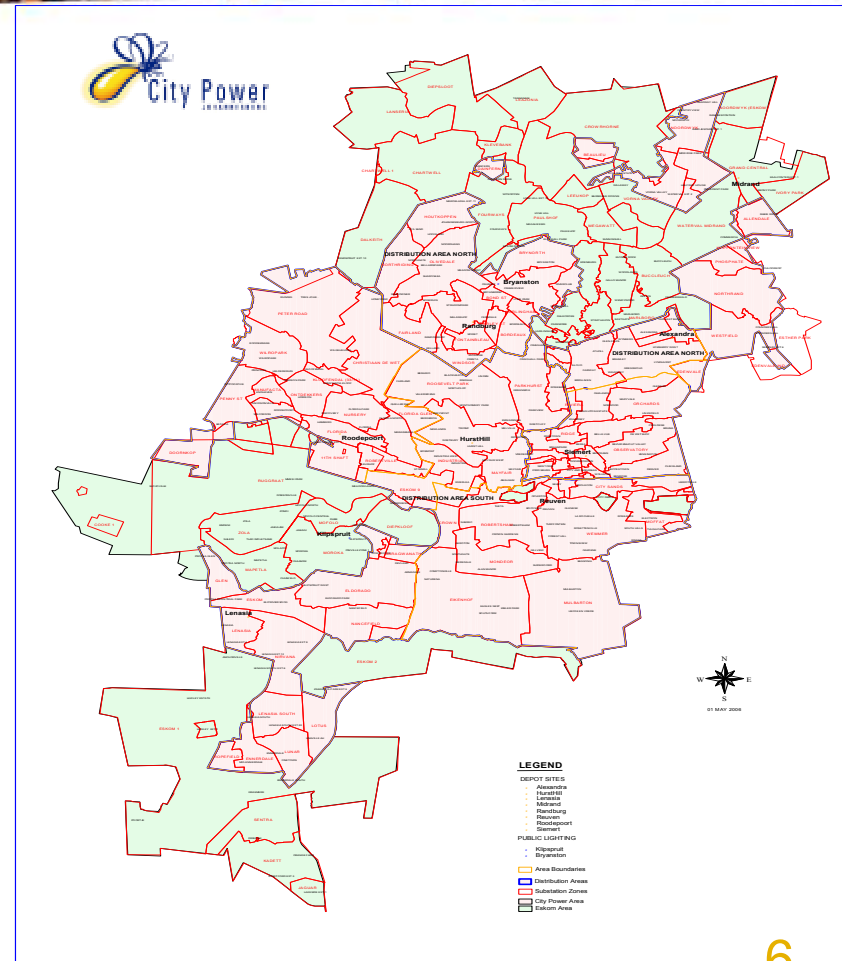




City Power area of supply

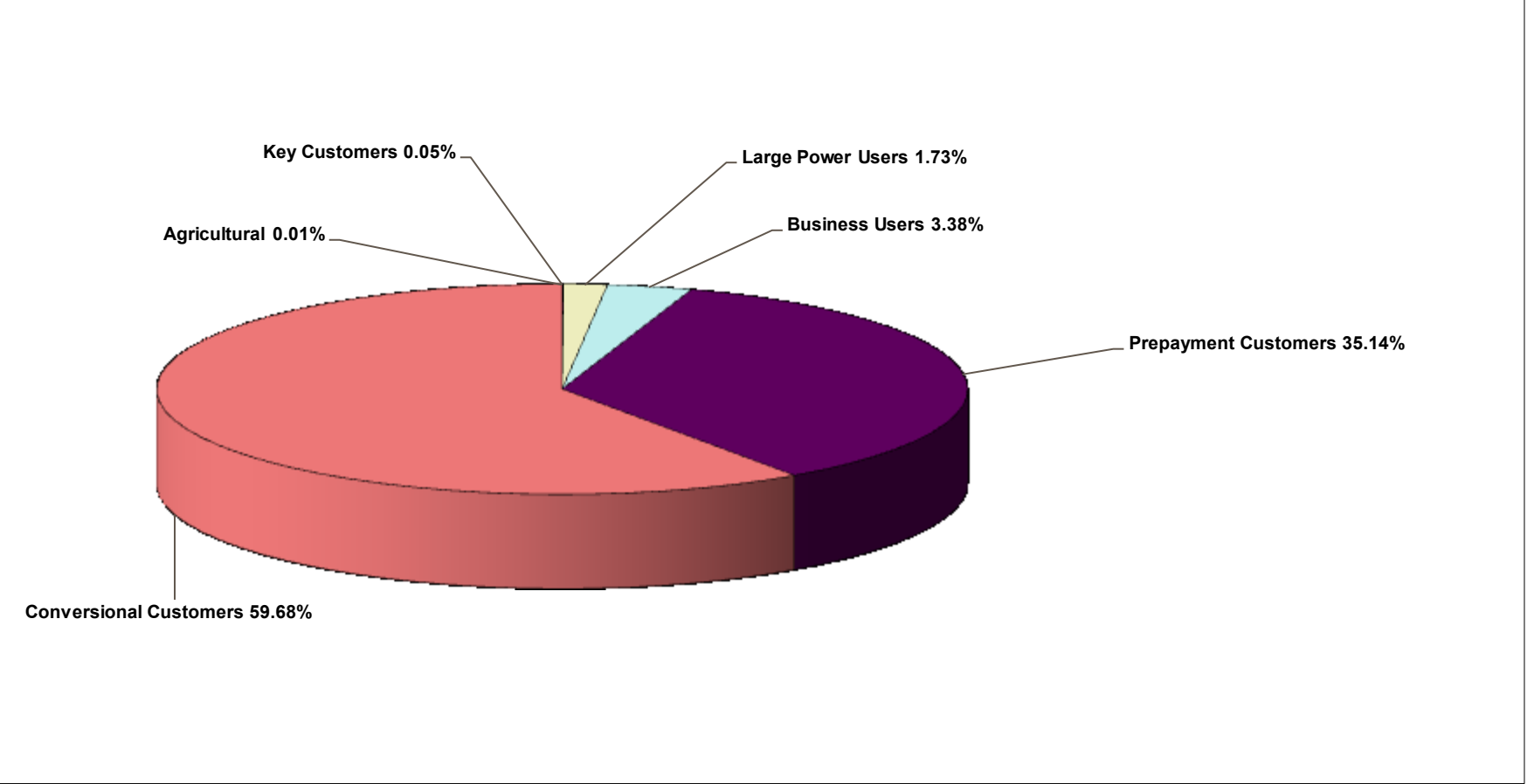


- City Power consists of **six (6)** essentially independent transmission systems Johannesburg, Randburg, Roodepoort, Sandton, Midrand and Johannesburg South
- There are also a **few minor independent** load points such as Alexandra, Dainfern, Lenasia, Modderfontein and Vlakfontein
- When City Power was formed in 2000/1:
 - The **technical designs** and features of the various systems were often **diverse** and the systems had **little interconnection**
 - The network had reached its **theoretical life expectancy** (equipment older than 30 years)
 - Little or **no maintenance** at all had been done over the years – hence high number of **outages**





Customer base





Revenue Protection Department



- In 2002 Revenue Protection department was created
 - 1 X RPM
 - 1 X RPA
 - 6 X RPO
 - 3 X Pre-edit
 - 3 X Meter reading analysts
- With a non technical loss of **12,2%**
- In 2003 Revenue Protection Team was established
 - CS & Operations Area Managers
 - Metering Department
 - Communication Department
 - Risk Control
 - JMPD
 - RPO



Challenges



- No-go Areas
 - Meter faulty
 - High number of illegal connections
- Low reading rate – 85%
- Low prepayment sales – R 200k
- 60 000 unallocated meters
- 30 000 non split meters
- High number of erroneous bills
- Vandalised network
- Dial meters
- Limitations on traditional vending systems
- Inadequate billing system – NO business intelligent reporting
- Long distance to vending station or offices
- Culture of non payment



Strategies



<i>Strategic Priority</i>	<i>Strategic Intent</i>	<i>Realisation Strategies</i>	<i>Benefits</i>
<p>Maximise revenue</p>	<p>To reduce non technical losses by 3 %</p> <p>Unbilled customers to be identified and billed</p>	<ol style="list-style-type: none"> 1. Improved meter reading. <ul style="list-style-type: none"> • Conversion of domestic to AMR • Continuous audits • Reduce NTC Codes 2. Prepayment roll out <ul style="list-style-type: none"> • Normalisation of unbilled areas • Aggressive conversion of domestic to prepaid • Install prepaid in all flats 3. Removal of illegal connections <ul style="list-style-type: none"> • Continuous removal of illegal on all areas • Issue summons • Audits on high-end consuming areas 4. Roll-out of protective structures 5. Estimated accounts <ul style="list-style-type: none"> • Audit level 3 • Audit LPU AMR • Cut-off estimated accounts over three months 	<ol style="list-style-type: none"> 1. Reduction of illegal connection 2. Improved profitability 3. Increased reading rate 4. Increase billing efficiency 5. Increase revenue 6. Reduce account queries 7. Improved customer satisfaction



(1) Initiatives



- Low consumption audit undertaken – corrective action taken
- 2003
 - a non-split meter were installed
 - 3 000 semi automated vending meters installed in Alex
 - Appointment of 4 meter reading contractors & 2 quality check contractors
- 2004
 - Appointment of contractors to do removal of illegal connections
 - Blanket audit in Midrand industrial customers – wrong CT/VT ratio
 - 250 AMR industrial meters were installed
 - Adjustment committee formulated
- 2005
 - Approval of 73 900 domestic smart prepayment system installation
 - Installation of 3 ton protective enclosures in challenging areas



(2) Initiatives



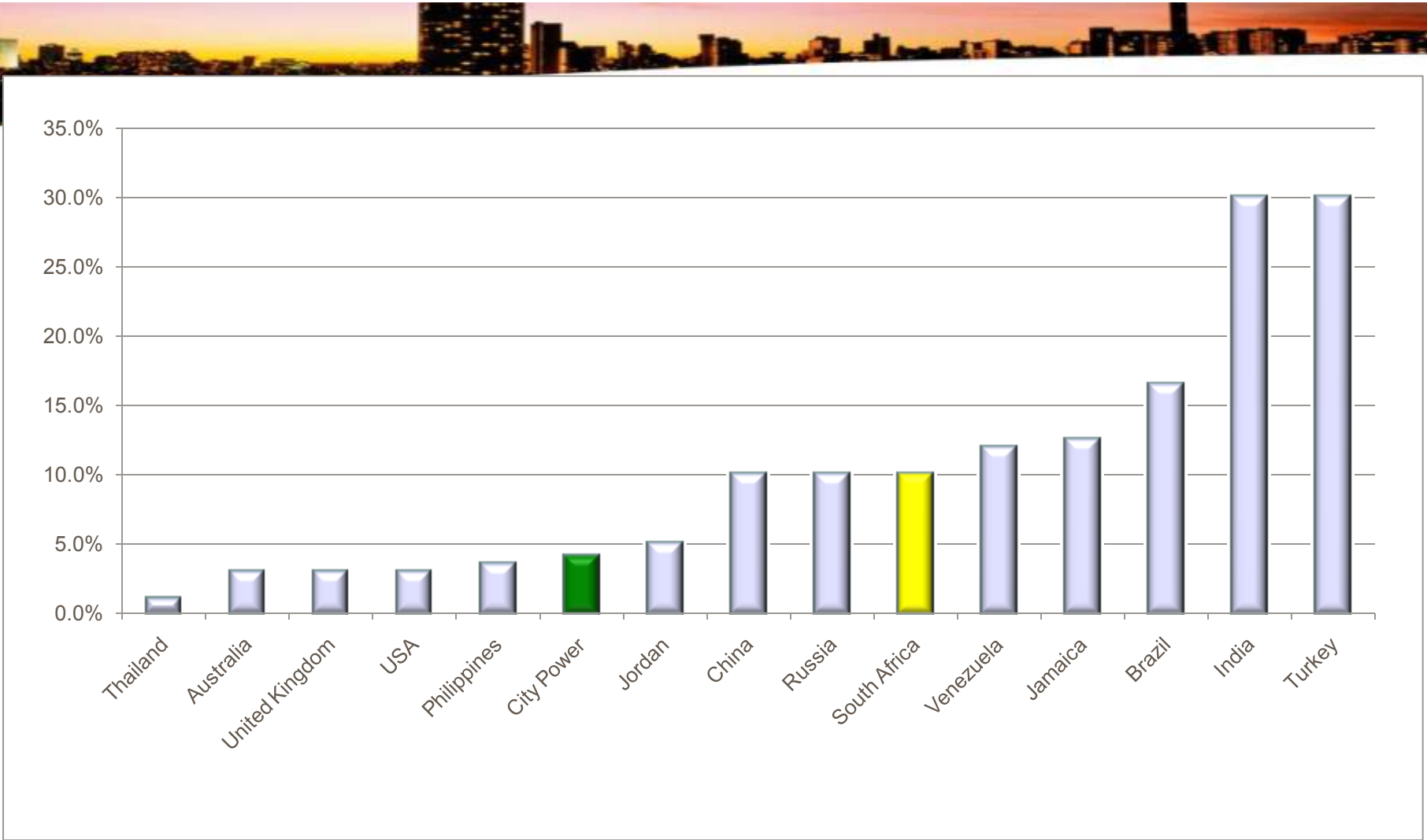
- 2006
 - Roll-out of meters with in-pods
 - Normalisation of challenging areas
 - Installation of protective enclosure with tamper alert communication
 - Opening of a tip-off line
- 2007 - to date
 - Training of municipal prosecutors on electricity theft
 - Training of magistrates on electricity theft
 - Application to change a provincial policy to include electricity theft as a crime
 - Process to change electricity by-laws started



Results



International NTL benchmarks





- Prepayment sales has increased to R 23m per month
- Reading rate have increased to 96%
- Payment levels have increased to average of 99.5%
- Non technical losses are 3,5% (as audited by AG)
- Billing queries have reduced by half



Lesson learnt



- Smooth roll-out of projects has dependencies
 - Stakeholder buy-in
 - Community & ward councilors
 - Customer education
 - Availability of resources
 - Manpower & Finance
 - Skilling of locals and appointment on projects
- Theft and vandalism to network
 - Community policing forums – sense of ownership
 - Good working relations with SAPS (scrap yard owners)
- Removal of illegal connections
 - Close work relation with Metro police
 - Understanding on how the law works (prosecutors and magistrate training)
 - Tip-off line
- **Sense of ownership to staff members**



Way forward



Customer Type	Customer Base	Existing Technology			Future	
		Non-AMR (Old Tech)	AMR (New)	Split Pre- payment	Full AMI	Semi - AMI
Commercial/Industrial	12 000	4 000	8606	0	4 000	0
Domestic: Conventional	210 000	191 500	18 500	0	60 000 (high consumption - prepaid)	131 500 (Prepaid)
Domestic: Prepaid	140 000	27 000	43 000	70 000	0	27 000 (Prepaid)
Totals	362 606	222 500	70 106	70 000	64 000	158 500



- Automation of network using AMI as a base
- Continuous removal of illegal connections based on:
 - Zero and Low consumption reports
 - Auditing of level 3 disconnected customers
 - Meter reading technical codes
 - Tip-offs from customers
 - Energy balancing per substation
 - Operations
- Finalisation of the provincial policy
- Electricity by-law replacement
- Installing prepayment meters on customers without meters
- Installing smart meters on NO ACCESS customers
- Installation of protective enclosures to challenging areas



Thank you

