

Smart Metering Solutions for African Utilities



**A Presentation by:
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AGENDA

- Who is Conlog
- Company Overview
- Our Digitized Offer
- The Kroonstad Story

Conlog Strategy

Our vision is to...

enable our customers to manage their energy to be effective and efficient by providing holistic solutions, ultimately to improve the quality of life for All.



Our mission...

We are a metering solutions company for Utilities, to improve efficiencies in energy management, through quality products and services, by conducting ourselves in an open, transparent and ethical business manner.

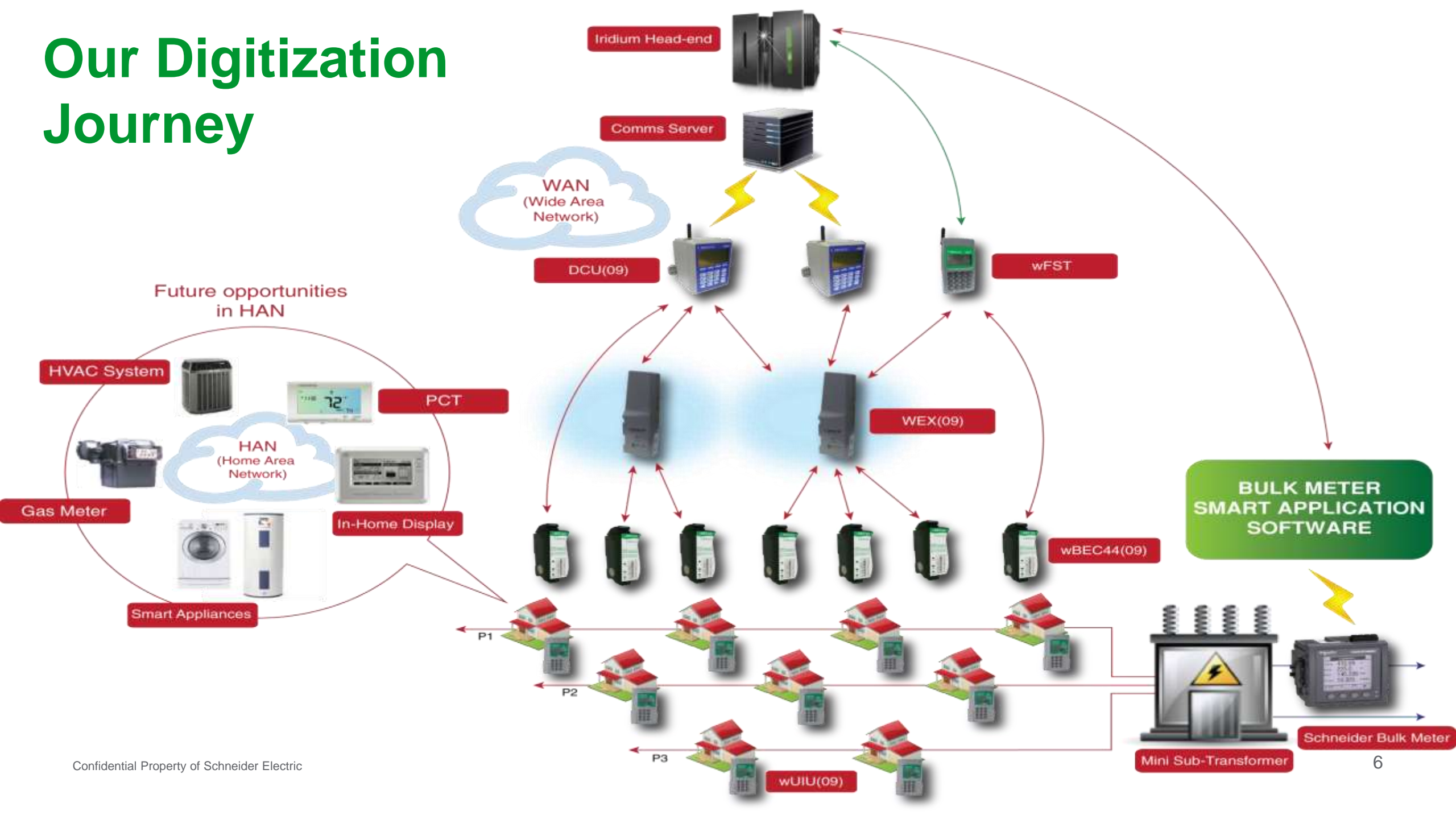
Company Overview

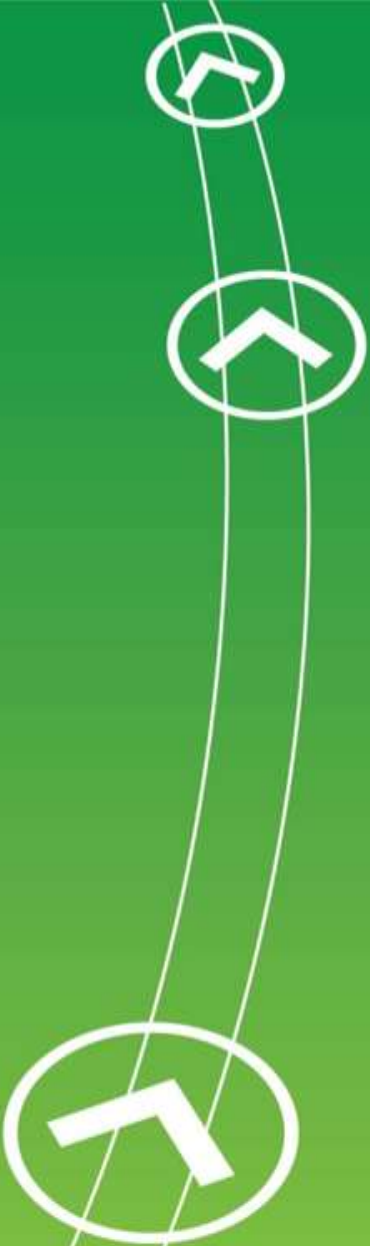


- Solutions for today and tomorrow
- Strong brand awareness, in Africa
- Synonymous for superior quality
- Platform of excellence through innovation
- Global footprint
- Holistic metering approach

Conlog is a proudly African company that has been at the forefront of pioneering solutions since the inception of the South African metering prepayment industry in the late 1980s, meeting the needs of utilities worldwide.

Our Digitization Journey





•The Kroonstad Story

Fuel Cell Technology

- > Fuel Cell technology is the process of converting fuel to electricity
- > Fuel Cell Technology offers a more fuel-efficient, low-carbon, low-noise alternative
- > It is a cost competitive method of delivering electricity rural areas away from the grid



Kroonstad Fuel Cell Technology Project – Stakeholders

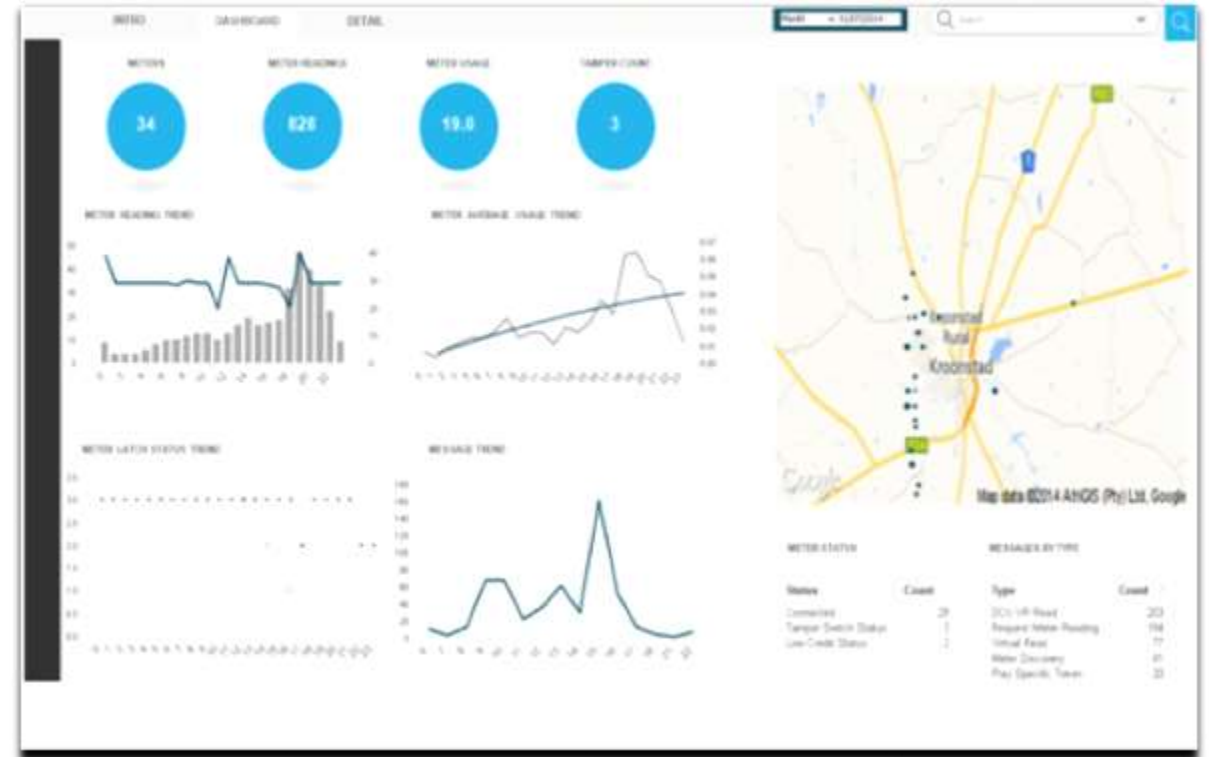
> Main Stakeholders:

- > Anglo American Platinum
- > Ballard Power Systems
- > Department of Energy
- > Moghaka Municipality
- > University of Witwaterstrand
- > Eskom RTD

The Conlog AMI solution

AMI allows us to do the following:

- > Collect data from meters
- > Remotely send data and tokens to meters
- > Perform load balancing
- > Generate profiling reports
- > Perform demand side management
- > Alerts – combat tampering



Essentially, AMI gives us the ability to transfer data to and from meters in the field with the aim of managing sites remotely. It also gives users the ability to access their own metering data in order to manage their own electricity usage.

Fuel Cell Technology Project - Scope

- > Demonstrate the Fuel Cell Technology for rural electrification in South Africa
- > First fuel cell rural electrification project in the world
- > Aim is to supply electricity to rural development independent of an existing energy grid, at a reduced cost
- > Secondary aim of creating a high-tech manufacturing sector in the South Africa, local jobs throughout the platinum fuel cell value chain and developing a new market for the platinum group metals, thus supporting and sustaining mining jobs.
- > Field Trial to be run over a 12 month period



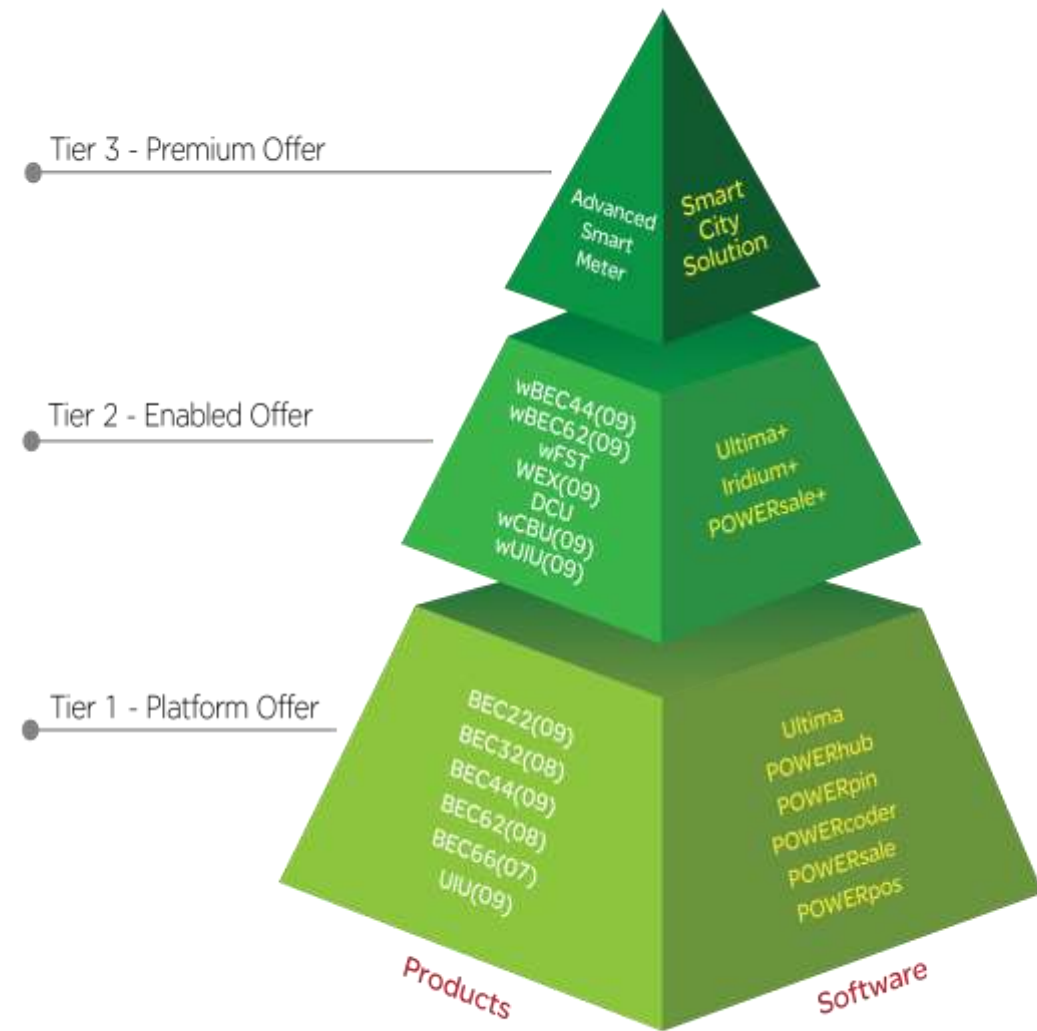
Kroonstad Fuel Cell Technology Project – Background

- > Together with Department of Energy, field trial site identified as Naledi Trust, under the Moghaka Municipality
- > Rural community has been off grid without access to reliable electricity.
- > The fuel cell system implemented sufficient to power radios, televisions, refrigerators, lighting, cell phone charging and cooking
- > Conlog involvement to supply prepaid electricity meters together with Management Tools
- > Prepaid Meters for the delivery of 50kWH free units and to educate consumers on responsible power usage



Kroonstad Fuel Cell Technology Project – Conlog involvement

- > Complete enabled offer implemented
- > Customers are able to purchase electricity and obtain Free Basic Electricity (FBE) vouchers from the Local Municipality
- > Wireless meters installed together with Data Concentrator Unit (DCU)
- > DCU facilitates the collection and remote control and interrogation of installed base
- > All data collected through the DCU is transferred to the Head End System
- > Data collected in a 6 hour intervals
- > Data is then utilised by parties concerned to monitor consumption and other trends
- > Purchase patterns, electricity usage patterns



Kroonstad Fuel Cell Technology Project – Outcome

- > Project, thus far, has proven that the fuel cell technology is a viable alternative to primary power provision to rural communities
- > Community is been supplied with electricity from platinum fuel cell technology and the trail will endure for 12 months
- > There are over 3.4 million homes without electricity in South Africa, 1.34 million of these are in rural areas.
- > There are 82 million households in Africa without electricity
- > A successful project will allow commercialisation of the technology in South Africa for local and export
- > Intended market introduction in 2017, with similar implementation approach in rural areas across South Africa



Thank you