

Benchmarking in the South African EDI context

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PRESENTATION OUTLINE



- ❖ **Purpose**
- ❖ **What is Benchmarking**
- ❖ **An introduction to the South African Context**
- ❖ **Proposed Approach to South African Pilot**
- ❖ **Conclusion**

- ✿ To contextualise the data available from the EDI Holdings Ringfencing Project and provide an interpretation of relative performance by utilising international benchmark data and best practice information.
- ✿ Discuss an approach to distribution electric utility benchmarking in the South African context, including a proposed programme to provide for active participation by a targeted group of municipalities.

WHAT IS BENCHMARKING - a reminder

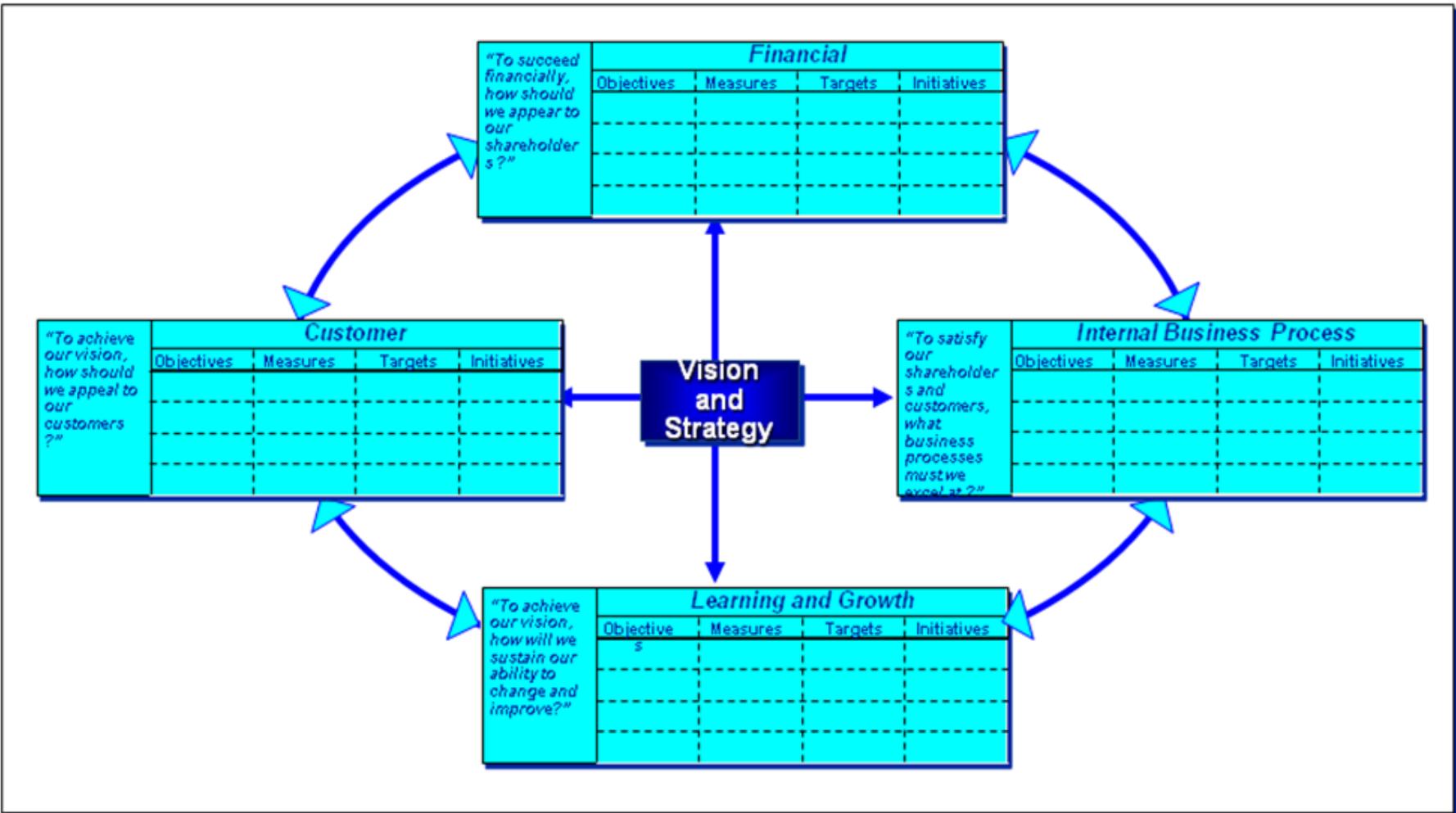
Measure performance against comparable utilities, using a predetermined set of indicators to understand relative performance and initiate performance improvement through pursuit of applicable best practices.

Why Benchmark?

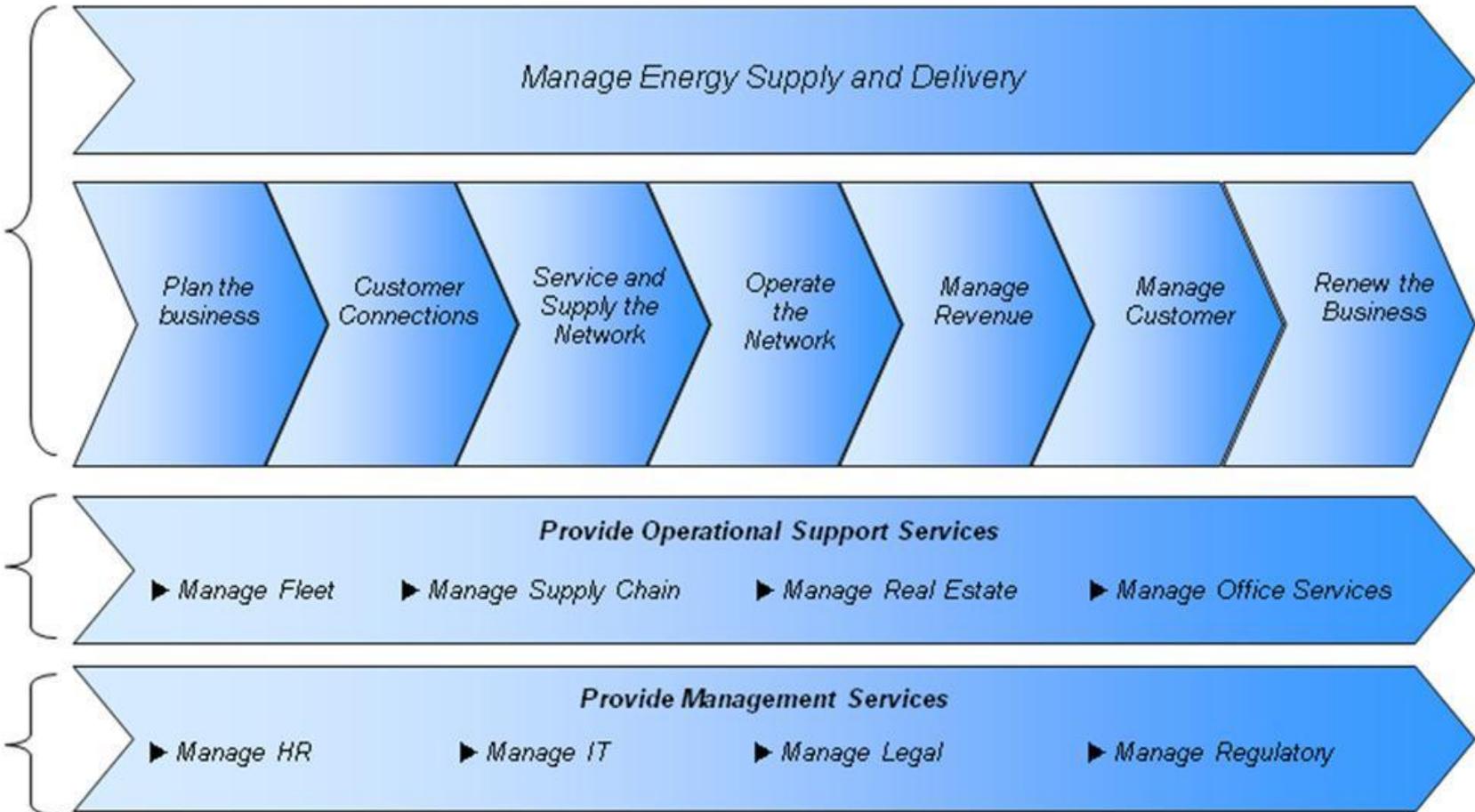
- ✿ Primarily used to enhance business performance – benchmarking performance against other similar businesses can provide insights into your business performance and best practices offer a perspective on what the leaders in the industry internationally are doing.
- ✿ Arguments against Benchmarking largely focus on uniqueness. However, international utilities are remarkably similar to business operations fundamentals. Panels can be compiled from programmes that represent a large number of participants, to factor in certain differentiators such as geography, customer base, customer mix, density, climate, governance structure etc.
- ✿ In the South African context, efficiency analysis through benchmarking can identify cost drivers and efficiency improvement opportunities, to address shortcomings and limitations in the current practices and performance of the industry.

- ❖ Approaches differ, but fundamental elements of setting baseline performance metrics reflect consistently.
- ❖ Performance metrics are defined as a comprehensive set of quantitative and qualitative measure and targets that are representative of the business results desired, balanced across all aspects of the business i.e. a Balanced Scorecard approach.
- ❖ Performance metrics should focus on results rather than activity, be balanced to avoid sub optimisation, align with the broader vision and strategy of the business and be reflective of the entire business value chain.

Indicative Balanced Scorecard



Indicative Utility Value Chain



- ❖ Benchmarking Programmes are generally supported by a Best Practices Methodology.
- ❖ Benchmarked data provides an opportunity to identify performance and operational practices that differentiate top performing utilities from the rest.
- ❖ The resultant best practices are tested business practices that contribute to superior performance.
- ❖ Once selected for business fit, implementation, consistent execution of practices, rigorous measurement and focus on the outcomes is key to gaining significant improvements.

An introduction to the South African Context

- ❖ Benchmarking is treated with some trepidation and suspicion within the utility industry in South Africa, but the outcomes can be useful in assisting with improving the overall industry performance and sustainability.
- ❖ A number of municipalities have indicated a willingness to participate in a pilot programme. We believe that with appropriate effort invested in data collection, significant insights and potential operational performance improvement opportunities will be identified.
- ❖ As an example of the type of analysis that can be done, EDI Holdings utilised the Ringfencing data for a number of measures and compared it to an international mean for preliminary analysis

Sample of comparisons of South African performance, based on available Ringfencing data and the International Mean (...1)

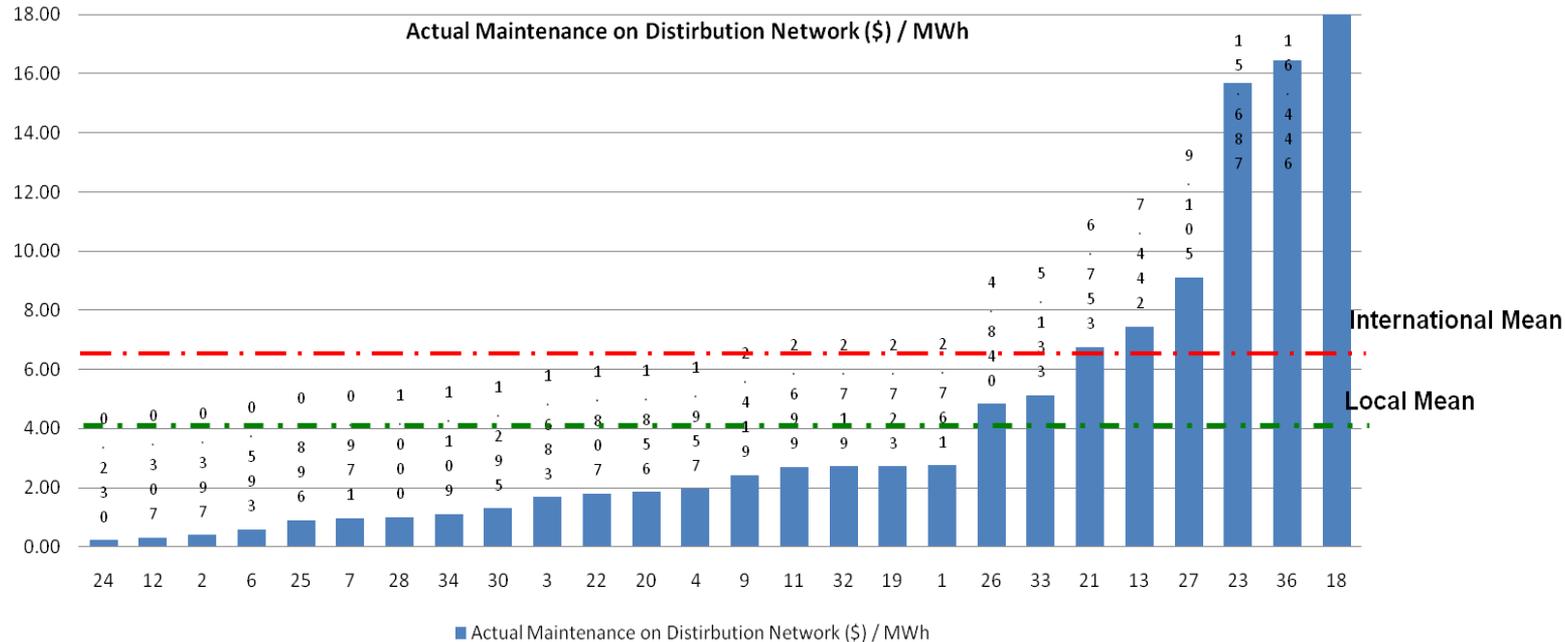
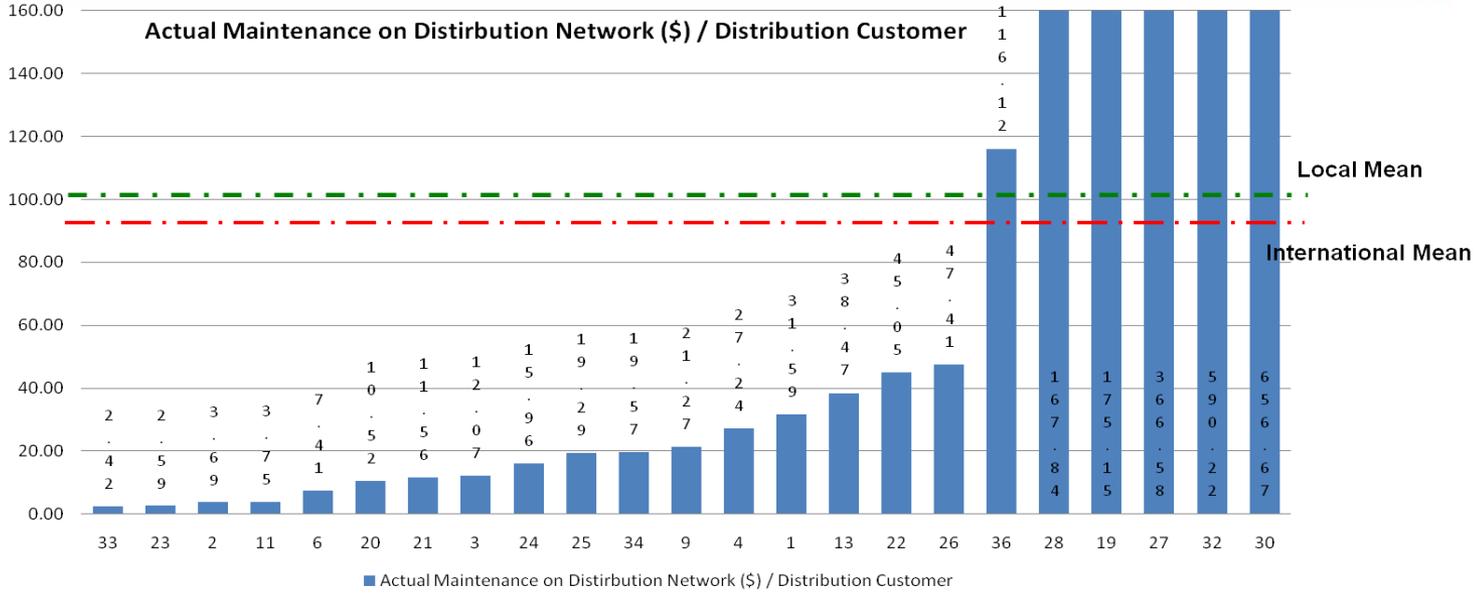


Figure 1 Total Maintenance Spend on Distribution Network per MWh

Preliminary Analysis

Locally the actual total maintenance spend per MWh on distribution network is lower than the international mean. The local mean is drawn upwards by very high spend within some of the municipalities within the sample set. The sustainability of this low spend practice is questionable as maintenance of the network is a primary factor for sustainable business performance over the long term. It is also important to note that the international reference panel is not confronted with a maintenance, refurbishment and strengthening backlog to the extent of the situation in South Africa.

Sample of comparisons of South African performance, based on available Ringfencing data and the International Mean (...2)

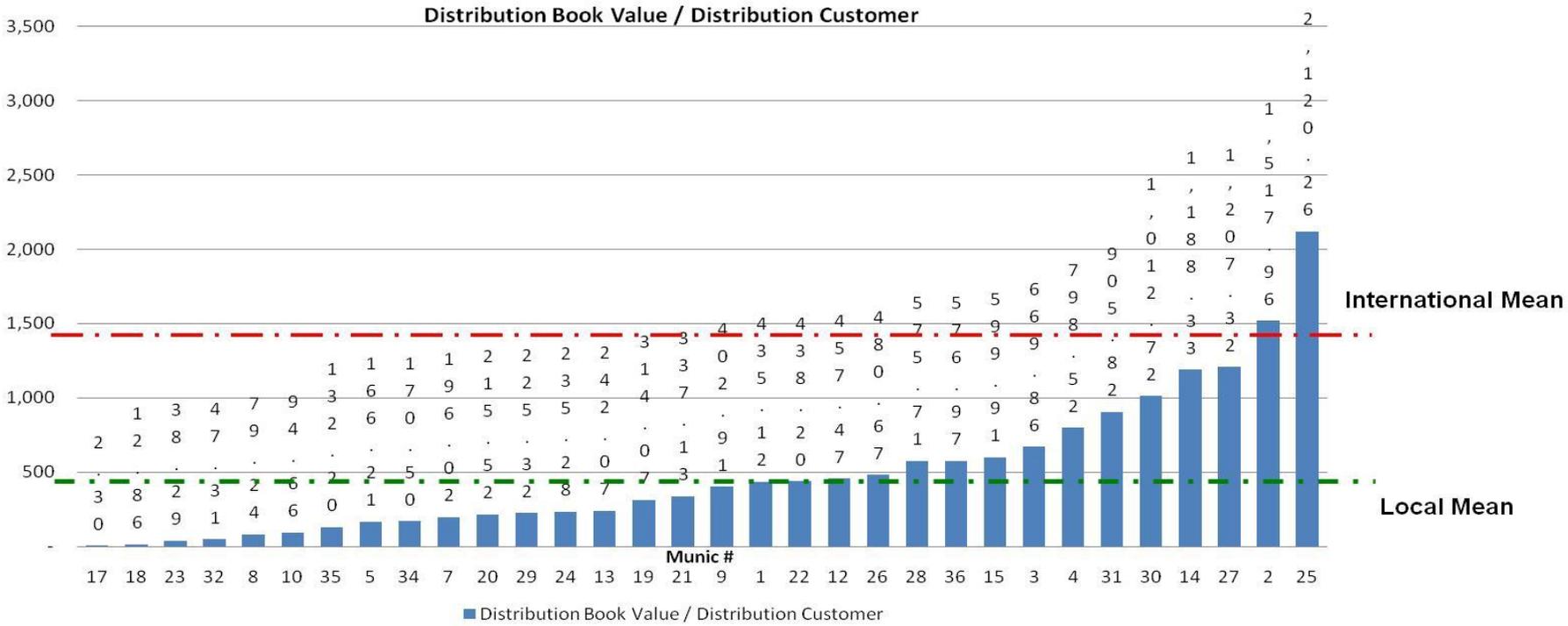


Preliminary Analysis

Actual maintenance spend per distribution customer, ignoring the current maintenance, refurbishment and strengthening backlog, indicates that there is not too much of a difference between the international benchmark mean and the local mean. However the local mean is definitely pulled upwards by the investment of a few municipalities while the majority are well below the bench mark. These statistics reinforce the need for addressing the backlog while investment levels in a number of the current utilities must be improved.

While there might be opportunities for some municipalities to review their asset investment approach, for the majority of the sample, attention will need to be given to the distribution infrastructure maintenance spend, as the network would be at risk.

Sample of comparisons of South African performance, based on available Ringfencing data and the International Mean (...3)



Preliminary Analysis

Locally the distribution network value per distribution customer is substantially lower than the international benchmark. This indicates that either renewal of the network infrastructure is not occurring, or that the existing infrastructure is being used to service a large and growing customer base with little new asset creation.

Proposed Approach to South African Pilot

- ✿ A proposed approach was presented to the AMEU Executive Council meeting in Mossel Bay in November 2009. Received support and a number of municipalities indicated an interest in participation.
- ✿ Developed a roll-out process and data collection questionnaire and database - have ensured that there is alignment between the Ringfencing Toolkit, Data Maintenance template and the Benchmarking template to avoid duplication of effort.
- ✿ Initial Target Group
 - 6 Metro's
 - 12 Secondaries (Drakenstein, Stellenbosch, Centelec, Buffalo City Municipality, Umfuleni, Mogale City, Klerksdorp, Tlokwe, Msunduzi, Umthlathuze, Polokwane, Rustenberg)
 - Any other municipalities that have a specific interest in the programme and have access to the type of data required to populate the template e.g. Tzaneen have indicated an interest.
 - This group represents some 75 to 80% of all municipal electrical distribution by sales volume in South Africa.
 - The intention is to also include the six Eskom Distribution Regions into the panel in due course.

* The questionnaire reflects a Balanced Scorecard approach to data elements that provide a holistic indication of the broad Electric Utility business performance. There is a strong correlation to international benchmarks and best practice data requirements, with SA customisation and additions.

* Key data fields include:

- Quality of Supply
- Safety
- Customer Service
- Financial Performance
- Asset Management
- Resourcing
- Revenue management

- * The eighteen targeted municipalities (and any others that indicate a specific interest in the programme) will be contacted within the next two weeks to identify project management contact persons per utility.
- * Planning meeting with all participants will be scheduled for late October 2010.
- * First pass data submissions from participants and participation closing date: Friday 03 December 2010.
- * Data validation to be completed by Friday, 21 January 2011.
- * Results and Best Practices Conference with international guest speakers scheduled for February 2011.

* Immediate Term : Current Business

- Identifying Cost drivers and efficiency improvements, to be used to develop business strategies for current asset owners.
- Implementation of strategies where possible to realize immediate business benefits
- These business strategies for identified opportunities will be drawn into the associated RED business plan, to support the business case and viability

* Medium Term: Sustainability

- Focus on internationally accepted key parameters in the business, used to drive KPIs
- Efficiency improvements realization thorough trend analysis and the application of best practices
- Quantitative based business processes

- ✿ Long Term: Industry performance optimization
 - Operational benchmarking as a preferred means of business performance improvement
 - Validated data available to industry, regulator and decisions makers to assess distribution performance and risks
 - Improved business strategy formation to socio-economic drivers, aligned to supporting the countries growth rather than presenting a potential risk.

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- ✿ Benchmarking performance against comparable utilities provides an objective assessment of relative performance.
- ✿ Insights gleaned from benchmarking outcomes and best practices enables structured and focused performance improvement initiatives.
- ✿ The proposed pilot study for South African utilities provides an opportunity to better understand current business performance and target areas and practices for operational improvement initiatives.

THANK YOU

