

**MIGRATION OF ELECTRICITY TARIFFS TO
COST REFLECTIVITY IN THE SADC REGION
A CASE STUDY OF ZAMBIA**

**Presented at
ACER/CCRED CONFERENCE**

(11-12 March, 2016)

Livingstone-Zambia

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1.0 Introduction

- ❑ The SADC region comprises of 15 member states.
- ❑ In 2004 - SADC Energy Ministers adopted the principle of cost reflective electricity tariffs.
- ❑ In 2008 - SADC Energy Ministers resolved that member countries should endeavor to reach cost reflective tariffs by 2013.
- ❑ In 2015 – 2 out of 15 members reported to have attained cost reflective tariffs.
- ❑ Attainment of cost reflective tariffs target shifted to 2019.

What are the challenges in migrating to cost –reflective electricity tariffs in the region???

1.0 Introduction (cont...)

- ❑ Cost reflectivity is attained when the tariff can recover all the allowable costs of each regulated and licensed activity within the generation, transmission, distribution and supply value chain (RERA, 2015).

- ❑ Allowable Costs in this case are all operating costs reasonably incurred, a fair rate of return on used and useful utility assets plus any other unique cost components allowed to be included in the calculation of the tariff level.

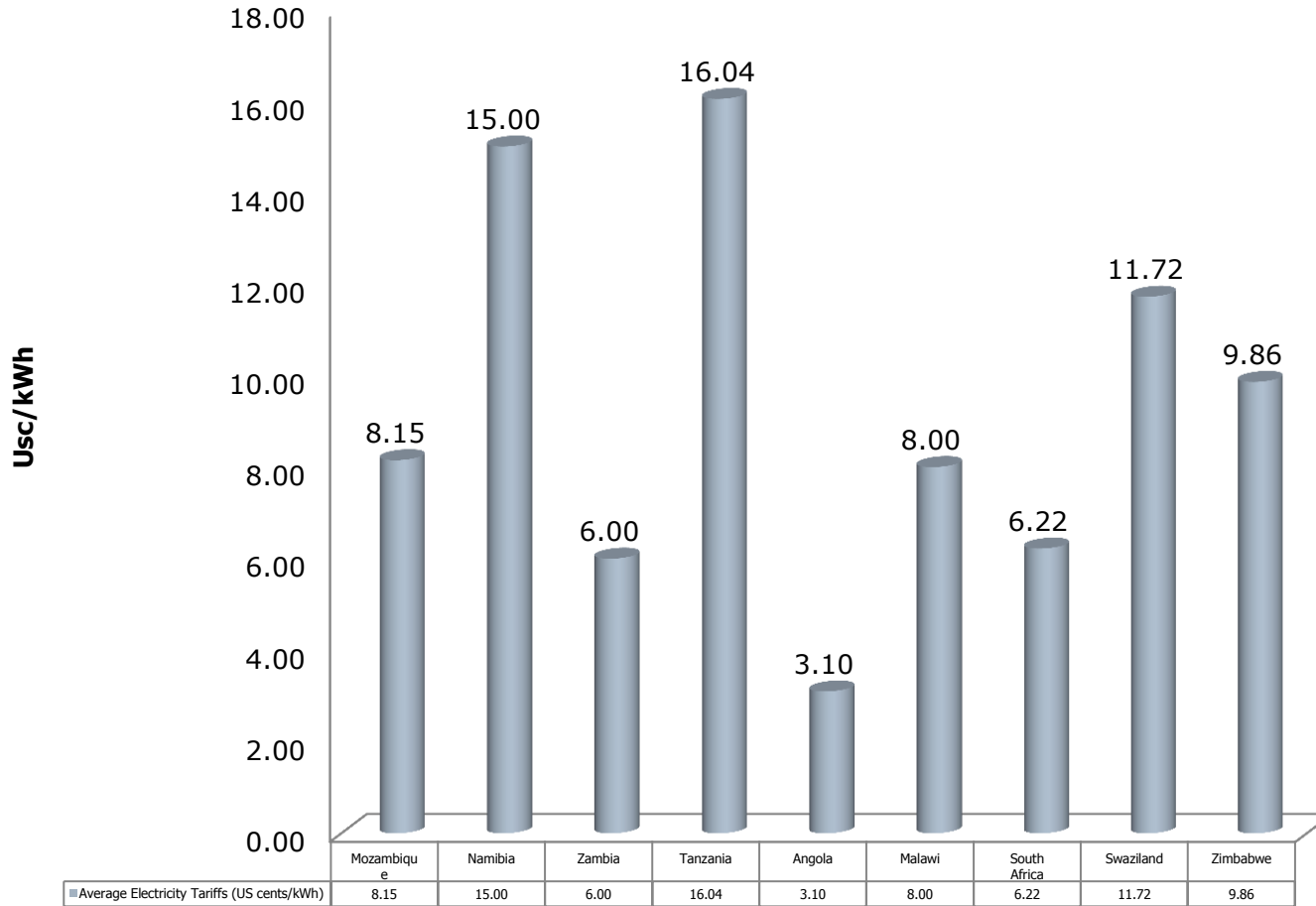
- ❑ Cost reflective tariff structures usually include two basic categories, an energy charge(s) for the power used, and a delivery charge(s) to cover the cost of transporting the power to the user (RERA, ibid)

1.0 Introduction (cont...)

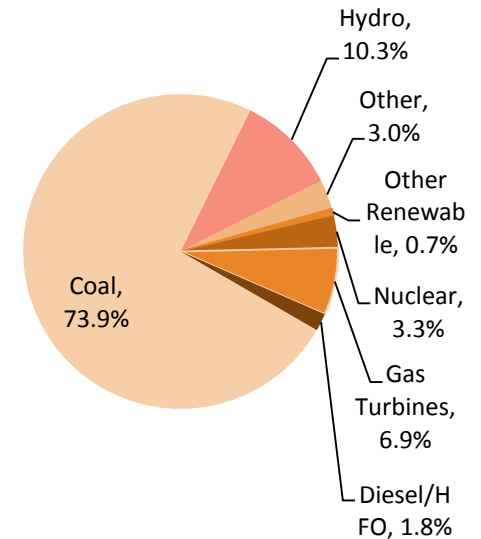
Migrating to cost reflective tariffs can be accomplished in different ways:

- Determination of Required Revenues;
- Performance of a Cost of Service Study (CoSS); and
- Designing New Tariff Rates.

Average end-user electricity tariffs –Aug 2015



Generation Mix - 2013



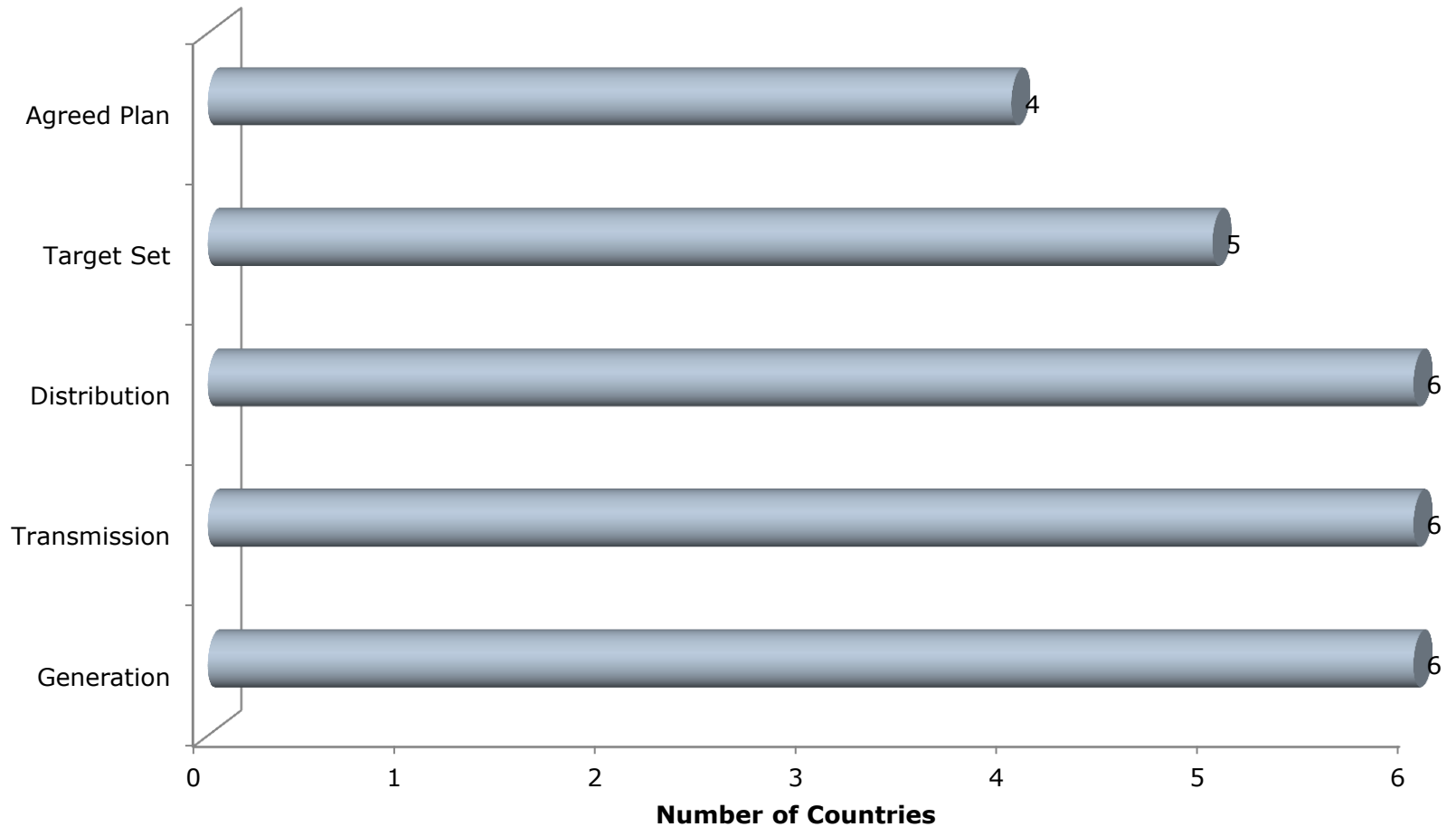
Various methodologies exist in the tariff setting process.

Adoption of a methodology will depend on the development of the Electricity Supply Industry in a specific country.

- Price Cap;
- Yardstick/Benchmark;
- Incentive Based regulation (IBR); and
- Rate of Return (RoR).

In Zambia the Rate of Return Methodology is used.

SADC progress - 2013



In the Zambian case:

- ❑ Energy Regulation Board (ERB) commissioned a CoSS for ZESCO in 2006;
- ❑ ERB approved average tariff increases of 27%, 35%, 26% and 16% in 2008, 2009, 2010 and in 2014 respectively;
- ❑ In 2015, ERB approved ZESCO's application to increase tariffs by a weighted average of 216%;
 - ❑ ZESCO made an application to withdraw the tariff increase and the decision was reversed.
- ❑ Legislation Review - Multi Year Tariff Framework and Automatic Pass through mechanism

- A. Promotes efficiency in the Electricity Supply Industry;
- B. Promotes Private Investment to the sector;
- C. Non-cost reflective tariffs limit network expansion by the service provider i.e benefits only those connected;
 - ❑ In Zambia, 22% overall have access to electricity (LCMS, 2010);
 - ❑ 53% urban
 - ❑ 5% rural in Zambia
- D. Self-financing electricity sector enables the Government to focus on other sectors such as education and health care;
 - ❑ In Zambia, World Bank estimates that US\$ 340 million in 2016 of additional support to ZESCO.
- E. Promote economic growth.
 - ❑ ZCCI estimated production had declined to the range of 10% to 50% for industrial players not using alternative sources of energy in 2015 due to load shedding

6.0 CHALLENGES IN MIGRATING TO COST REFLECTIVE TARIFFS IN SADC REGION

A. Affordability vs sector viability;

- ❑ Half of SADC population is estimated to live below the international poverty line of US \$1 per day.
- ❑ SADC relies on electricity intensive primary and secondary industries. i.e mining, manufacturing and metal manufacturing industries.
- ❑ Mining sector in Zambia accounts for 50% of the total national electricity consumption
- ❑ electricity-intensive mining and manufacturing sectors suffer the largest declines in output and employment as electricity tariffs increase.

B. Information asymmetry;

C. The absence of a MYTF supported by automatic pass through mechanisms;

D. Only 6 countries had determined cost reflective tariffs for the different segments in the supply chain;

- A. Government has a major role to play as it is a key stakeholder;
 - Policy pronouncement vs implementation
- B. Review legislation to allow for MYTF supported by periodic adjustments;
- C. Develop Integrated Resource Plan;
- D. Implementation of comprehensive energy sector reform plan;
- E. Coordinated approach between different Government agencies and ministries in the process of tariff determination; and
- F. Improved performance by Utility.

8.0 Conclusion

- ❑ Cost reflective tariffs critical for the sustainability of the electricity supply industry.
- ❑ Zambia faces challenges in migrating to cost reflective tariffs.
- ❑ Non-cost reflective tariffs contributed to energy deficit in SADC region.
- ❑ Tariffs should be carefully designed to strike a balance between cost reflectivity and affordability.

- A. SADC should move to cost reflective tariffs;
- B. Implementation of Cost reflective tariffs should be gradual;
- C. Develop comprehensive communication strategy to raise awareness on the importance of cost reflective tariffs;
- D. Undertake Research to determine the issue of affordability – Zambia;
- E. Develop integrated resource plan – Zambia; and
- F. Conduct the CoSS - Zambia

END OF PRESENTATION



**THANK YOU FOR YOUR
ATTENTION**