



THE POTENTIAL FOR IPPs IN THE SADC REGION

By

Dr. Lawrence Musaba

musaba@sapp.co.zw

And

Mr. Alison Chikova

Alison.Chikova@sapp.co.zw

PRESENTATION OVERVIEW

- 1. Introduction**
- 2. The Power Sector in the SADC Region**
- 3. Creating a favourable Investment Climate**
- 4. The SAPP Initiative of attracting the Private Sector**
- 5. Reviewing the results of IPPs in SAPP**
- 6. Potential Investment Areas**
- 7. The future of IPPs and Private Sector in SAPP**
- 8. Conclusion**

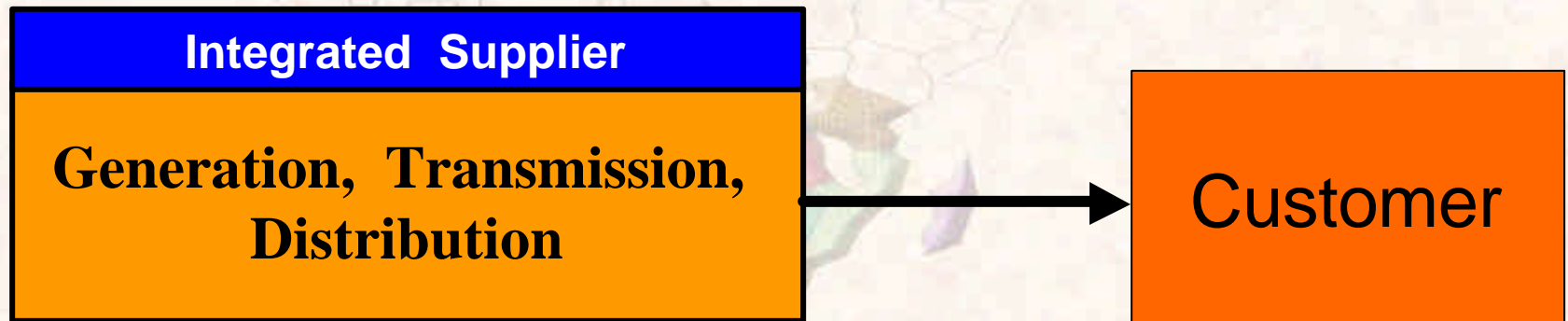
1. Introduction

Problems cited in the SADC power sector

- Lack of infrastructure to deliver electricity
- Lack of maintenance of infrastructure
- No funds to finance new investments
- Insufficient generation
- High losses, generation & transmission costs.

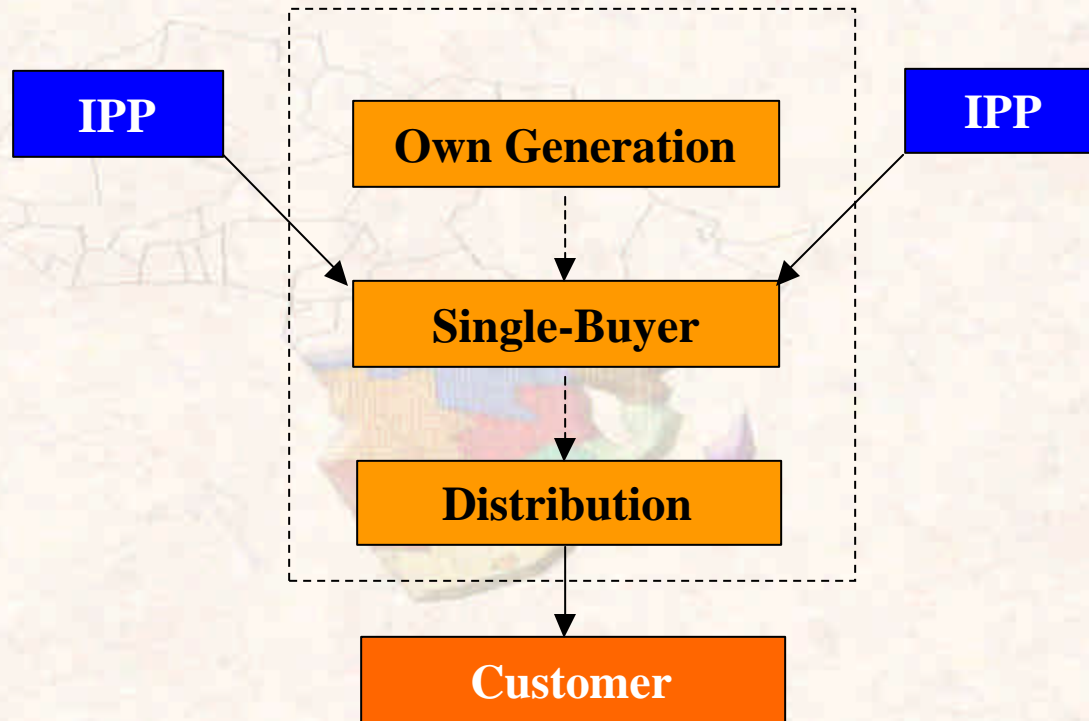
2. The Power Sector in the SADC Region

2.1 Traditional Structures



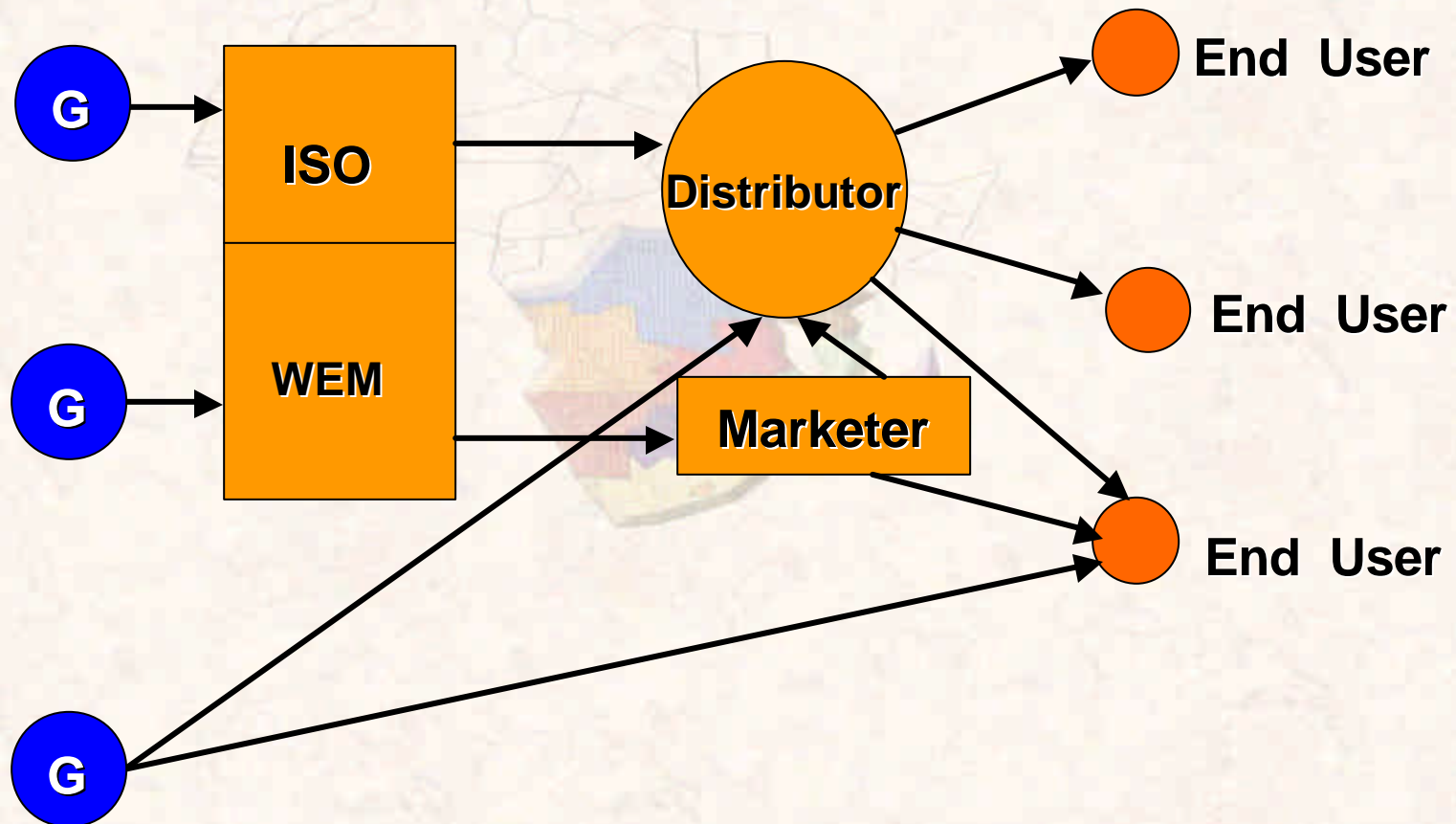
- ➔ Market dominated by Vertically Integrated Company -
One company generates, transmits and distributes.
- ➔ One Service Provider and Customers have no choice
- ➔ The company is Government dominated, sole shareholder

2.2 The Single-Buyer Model



- ➔ This model is being seen as the first step to **liberalization** and as a way of attracting the private sector into the power sector in Southern Africa.
- ➔ Examples of countries where this is currently being practiced include Mozambique and Zambia.

2.3 The New Structures



- ➔ **The Independent System Operator (ISO) is responsible for dispatch and system operations in the Wholesale Electricity Market (WEM).**
- ➔ **The end user can buy directly from a Generator (G) or a local distributor or a power marketer.**

The Key drivers for considering wholesale competition are:

- **Allow for Private Sector participation & New Players**
- **De-regulate the energy prices**
- **Establish an Independent Regulator**
- **Introduce competition and establish markets**
- **Rural Electrification Objectives**

2.4 Key Change Drivers

■ Need for Private Sector Participation

- **Generation expansion requirements are beyond the reach of most Governments and local financing Institutions.**
- **Reformed ESI creates desired climate to attract foreign Investors.**

■ Financing Requirements

- **Financing Agencies have stopped financing electricity sectors in their present form.**

■ Customer Expectations

- **Customer choices and rights**
- **Safe, reliable and cost effective supplies**

■ World Trends

- **Benefits obtained by others**

2.5 Current Status of the Reforms in Southern Africa

	Ang	Bot	Les	Mal	Moz	Nam	RSA	Swa	Tan	Zam	Zim
New legal framework				IM		IM	IM			IM	IM
Unbundling & IPP's											IP
Private sector participation.						IP	IP			IM	
Third party access											
New regulatory framework				IM		IM	IM			IM	IP
Reorganisation of distribution							IP				
Tariff reform											
Utility commercialisation	AS	AS	AS	AS	AS	IS	IS	IS	IS	IS	IS

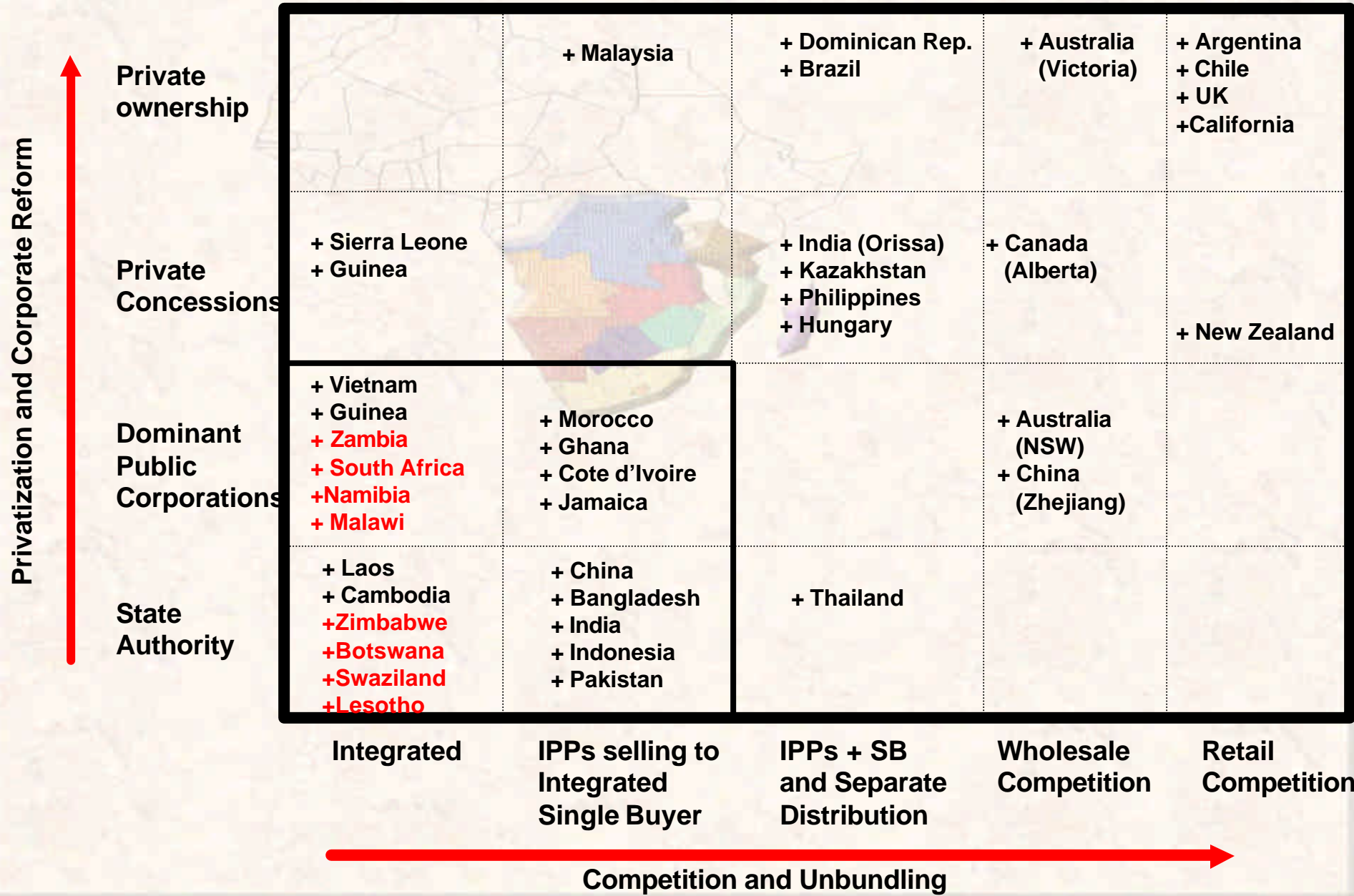
IM = Implemented

IP = In progress

AS = Advanced Stage

IS = Initial Stage

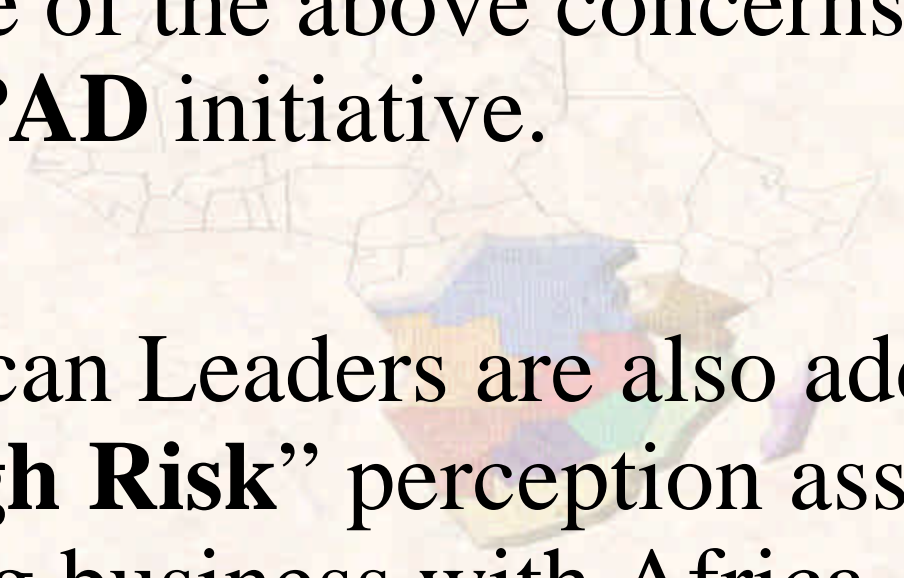
2.6 Benchmarking



3. Creating a favourable Investment Climate

Private investors are generally looking for:

- ➔ **A favourable political environment** – Top priority
- ➔ **A well functioning legal system** - Investors want the “rules of the game” to remain credible and enforceable. The laws should not be altered at government’s convenience once investment decision has been made.
- ➔ **Proper regulation of tariffs** - adequate energy tariff levels and collection discipline are important to investors.
- ➔ **Security for repatriation of profits & investment capital.**

- 
- African Leaders are trying to address some of the above concerns via the **NEPAD** initiative.
 - African Leaders are also addressing the “**High Risk**” perception associated with doing business with Africa.

4. The SAPP Initiative of attracting Private Sector Participation

- The SAPP has instituted a process of **restructuring** aiming at expanding SAPP membership and allow more participants into the SAPP.
- The start of the Short-Term Energy Market, **STEM**, is a good example of how SAPP has opened up the electricity market to other participants other than SAPP members.
- SAPP is encouraging members to **review the energy tariffs** and make them more competitive.

5. Reviewing the Results of IPPs in SAPP

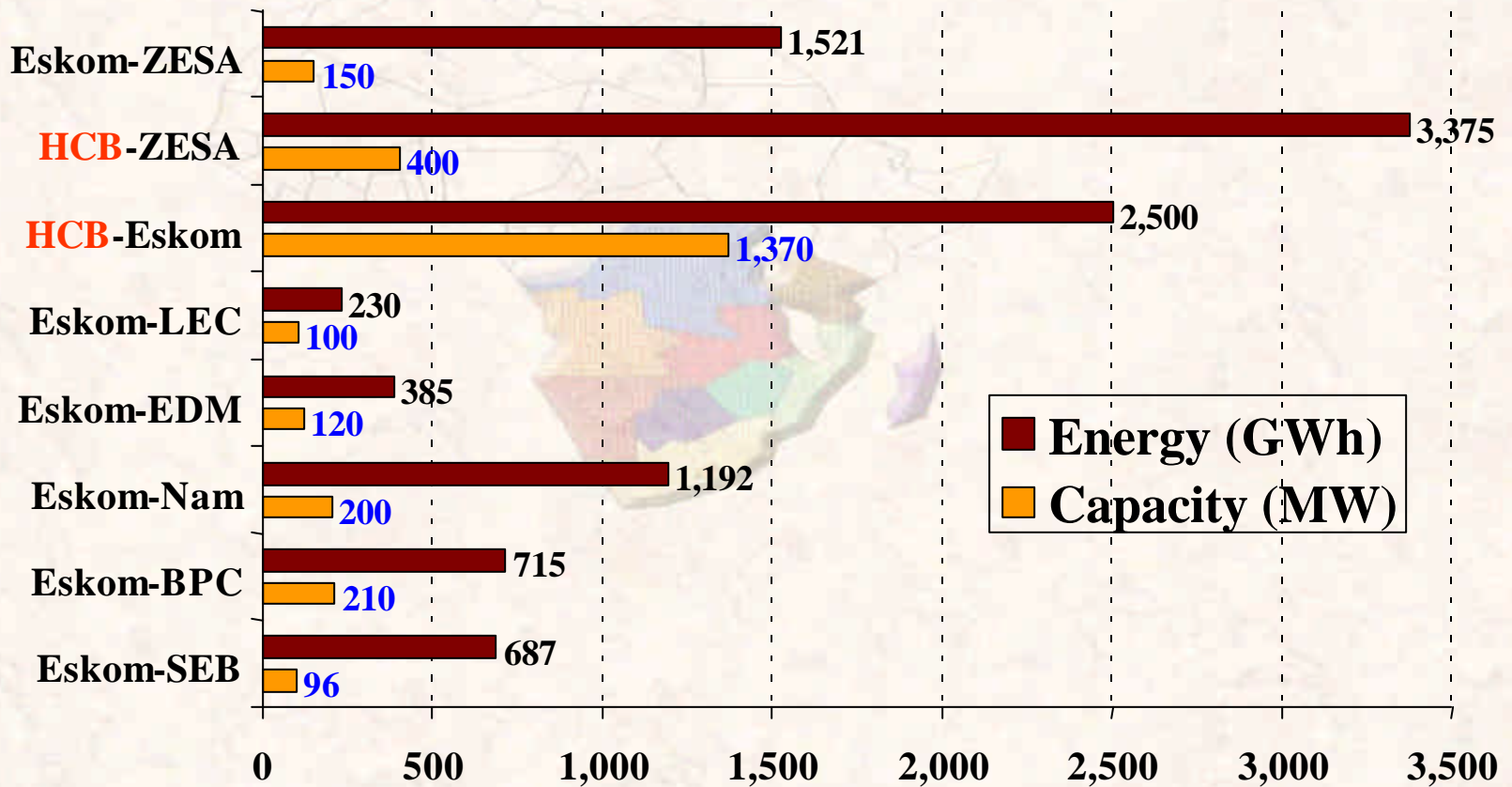
Two examples of IPPs in SAPP as follows:

No.	Name of IPP	Country
1	Hidroelectrica de Cahora Bassa, HCB	Mozambique
2	Mulungushi Hydro Power Station, MHPS	Zambia

Hydroelectric De Cahora Bassa (HCB)

- HCB of Mozambique is the first Independent Power Producer in Southern Africa.
- HCB operations started in 1975 with an installed capacity of around **2075MW**.
- In 2002, HCB had bilateral contracts with Eskom of **1,370MW** and with ZESA, **400MW**.
- HCB is also a regular participant on the STEM.

SAPP Bilateral Agreements - 2002



Negotiated Utility Contracts

HCB supply (hydro) 1770 MW

Eskom supply (thermal) 876 MW

Mulungushi Hydro Power Station, MHPS

- MHPS is a private company with **Eskom** of South Africa owning about 50% of the shares.
- **Zambian Management Team** owns the rest of the shares.
- The total power output of **38MW** is all contracted to ZESCO, the Zambian national power utility.

6. Potential Investment Areas

- ➔ Recent studies conducted by SAPP (*SAPP Pool Plan, 2001*) have established that the SADC region would run out of generation capacity in the year after 2007.
- ➔ In order to meet a rising power demand in the region, new generation infrastructure and new transmission lines would also be required to deliver the generated power.
- ➔ The SAPP would be looking to the private sector for participation in the planned generation and transmission projects.

The Pool Plan identified the least cost generation projects worth promotion for SAPP benefit as follows:

- ➔ The refurbishment of **Inga 1 & 2** in the DRC
- ➔ **Mepanda Uncua** hydro project in Northern Mozambique (**2,000MW**),
- ➔ **Kafue Lower** hydro project in Zambia (**600MW**),
- ➔ High Head Pumped storage in northern South Africa, and
- ➔ The development of **Inga 3** (**3,500MW**) or Grand Inga Stage 1 in the DRC.

SAPP is looking for the private sector to partner with SAPP and build, own and develop the above generation project.

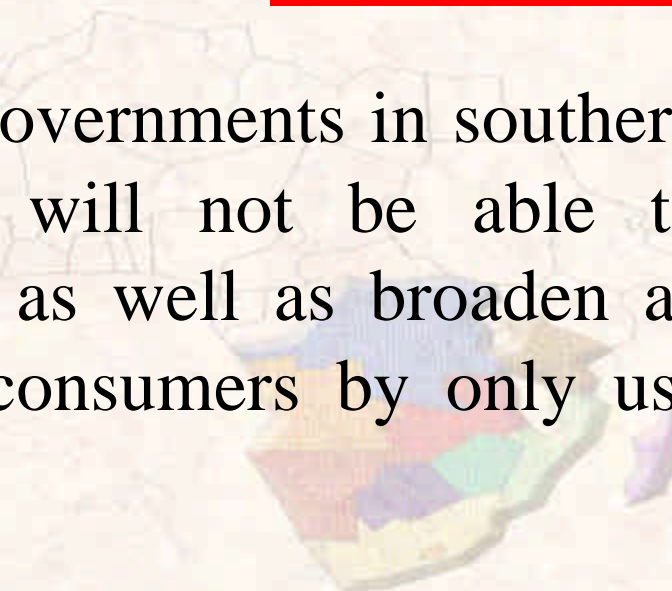
The SAPP has identified the following [transmission projects](#) as priority projects:

- ➔ The DRC-Zambia Interconnection
- ➔ The Zambia-Tanzania-Kenya Interconnection
- ➔ The Mozambique-Malawi Interconnection
- ➔ The Interconnection of Angola to the SAPP Grid

Distribution & Rural Electrification

- ➔ Apart from South Africa, about **60%** of the people living in southern Africa do not have access to electricity.
- ➔ To meet such a demand in electricity, there are huge demands for new infrastructure and the private sector could be the only option to inject the needed capital in the region.
- ➔ The private sector could also participate in government driven **rural electrification** projects and could provide cheaper and better technology solutions for solar and other renewable sources.

7. The future of IPPs and the Private Sector in the SADC Region

- 
- ➔ National governments in southern Africa have realised that they will not be able to finance generation expansion as well as broaden access to electricity to domestic consumers by only using public sources of finance.
 - ➔ In response to this challenge, governments have begun to restructure the power sector in preparation for private sector participation, leading to future privatisation of the power utilities.
 - ➔ The private sector is likely to dominate the SADC power sector.

8. Conclusion

- ➔ From an economic point of view, southern African markets are individually small and massive investment in the power sector cannot easily be justified to serve these individual markets. To assure the private sector and to provide confidence to investors in the SADC region, the SAPP is setting herself as a larger economic power market for the region.
- ➔ Massive opportunities for the private sector exist in the SADC region at generation, transmission and distribution levels. The climate for investment is getting better as the region is undergoing liberalisation in the power sector.

END