

Economic Community Of West African States
Communauté Economique Des Etats de l'Afrique de l'Ouest
Comunidade Economica Dos Etsados da Africa do Oeste



***“ Overview of the Power Sector Reform & PPA’s in
West Africa”***

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Presentation Overview

- **Why Reform of West African Power Sector**
- **Status of the reforms**
- **Prospects of the Reforms**
- **IPPs in West Africa**
- **Way forward for IPPs**



Why reform of West Africa Power Sector

- **Incapacity to finance operation and expansion of the system \Leftrightarrow Low level of performance**
- **Revenue collection**
- **High level of losses (between 14% and 45% according to the country)**
- **High level of tariffs & not cost reflective**
- **Low rate of electrification,**
- **Low availability of the installed capacity and network system /Poor quality of service**



Why reform of West Africa Power Sector

- **Incapacity to finance operation and expansion of the system**
- **Contestable market theory**
- **New technologies (GT , CCGT, NTIC...)**
- **IFIs Macro economic stability requirements**



How reform were conducted ?

- **New Law or electricity Code**
- **New Market Structure**
- **Privatization of Assets or Management**
- **Regulatory Body**
- **Rural Electrification Agency**

Reform Status in West Africa

Process underway in all countries (except Liberia, sierra leone)

- Laws adopted or under consideration
- Model widely used is a combination of
 - privatization of the operation of the utilities through a contract management or long term concession agreement, associated with the opening of the generation business to the private sector and progressive functional unbundling
 - Vertical and horizontal de-integration planned in Nigeria and Ghana
- Regulators operational in 1/2 of countries. Process underway in other countries
- IPPs operating in Cote d'Ivoire, Ghana, Nigeria, Togo and Senegal
- A subsidiary of Eskom is operating the Manantali Dam and the 225kV interconnection network between Senegal, Mali and Mauritania
- Failure on some contracts (Senegal, Mali, Guinea Bissau, Guinea)

Reform Status in West Africa

Country	Law	Regulation
Cap Vert	P	P
Benin	P	P
Burkina Faso	Loi n°060/98/AN du 17 décembre 1998	P
Cote d'Ivoire	Loi n° 85-583 du 29 juillet 1985 + Decrets 1998	ANARE
Gambia	P	P
Ghana	1997 PURC ACT, En. Com. Act	PURC/Energy Com.
Guinea	Loi L/93/039/CTRN du 13/091993	
Guinea Bissau	P	P
Mali	Loi 99-009 du 22/03/99	CREE
Niger	Loi 2003-004 du 31/01/2003	ARM
Nigeria	P	P
Senegal	Loi 98-29 du 14 avril 1998	CRSE
Sierra Leone	P	
Togo	Loi 2000-012 du 18/07/2000	ARSE

Reform Status in West Africa

Country	IPP	Type of Operator		
		Generator	Transmission	Distribution
Cap Vert		ELECTRA+Municip.		ELECTRA+Municip.
Benin		CEB		SBEE
Burkina Faso		SONABEL		
Cote d'Ivoire	CIPREL /AZITO	IPP+CIE	CIE	
Gambia		NAWEC		
Ghana	TICO (CMS/VRA)	IPP+VRA	VRA	VRA/ECG/ND
Guinea		EDG		
Guinea Bissau		EAGB + MUNICIPAL.		
Mali		EDM SA	EDM SA	EDMSA+
Niger		NIGELEC		
Nigeria	AES (enron)	NEPA+IPP	NEPA	
Senegal	GTI	SENELEC+IPP	SENELEC	
Sierra Leone		NPA		
Togo	Electrotogo	IPP+CEB	CEB	TOGOELECTRICITE

Prospects of Reforms



- **Tariffs**
- **Unbundling**
- **Legitimacy & Credibility of Regulation**
- **Third Party Access (Large consumers...)**
- **Private operators in the generation & distribution segments**



IPPs Trend in Africa



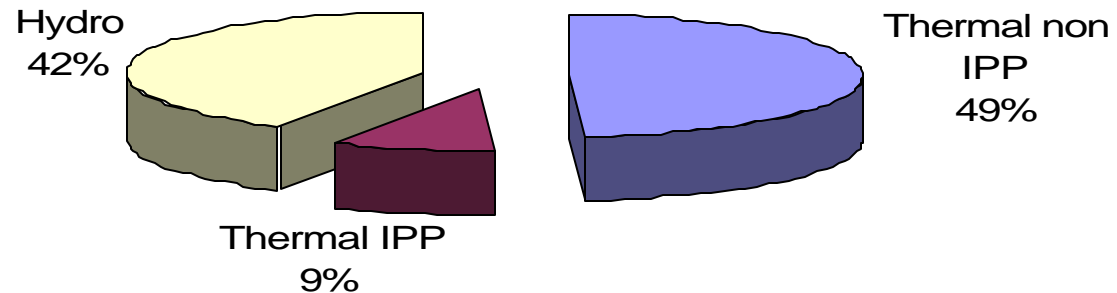
Note: * The 2001 figure shows the IPPs projects whose agreements were signed by September, 2001.

Source: *Karekezi and Mutiso, 1999; FT Energy, 2000a; FT Energy, 2000b; FT Energy, 2001a; FT Energy, 2001b; FT Energy, 2001c; FT Energy, 2001d.*

IPPs in West Africa

General Characteristics

Share of IPPs in West Africa



- **Cote d'Ivoire**
(Azito 300MW – CIPREL 210 MW)
- **Nigeria (290 MW)**
- **Ghana (JV 220MW)**
- **Senegal (GTI ~52MW)**
- **Togo (Electrotogo ~ 20 MW)**



IPPs in West Africa

General Characteristics

- **Long term take-or-pay contracts**
- **Direct agreement or competitive bidding**
- **Financed by sponsors equity, low interest loan (Dvpt Bank or agencies), Commercial Bank loan, Export credit agencies**
- **Extended govt guarantee / Insurance**
- **Little implication of local capital market**



IPPs in West Africa

Case Study 1 : Azito -Cote d'Ivoire

- **Owners**
 - **Cinergy Holding (ABB, EDF)**
 - **CDC Group**
 - **Azito Holding (IPS, AKF)**
- **330 MW CC Technology**
- **Take or pay contract with the Govt**
- **Gas contract guaranteed by the Govt**

IPP Contracts in Cote D'Ivoire – Azito





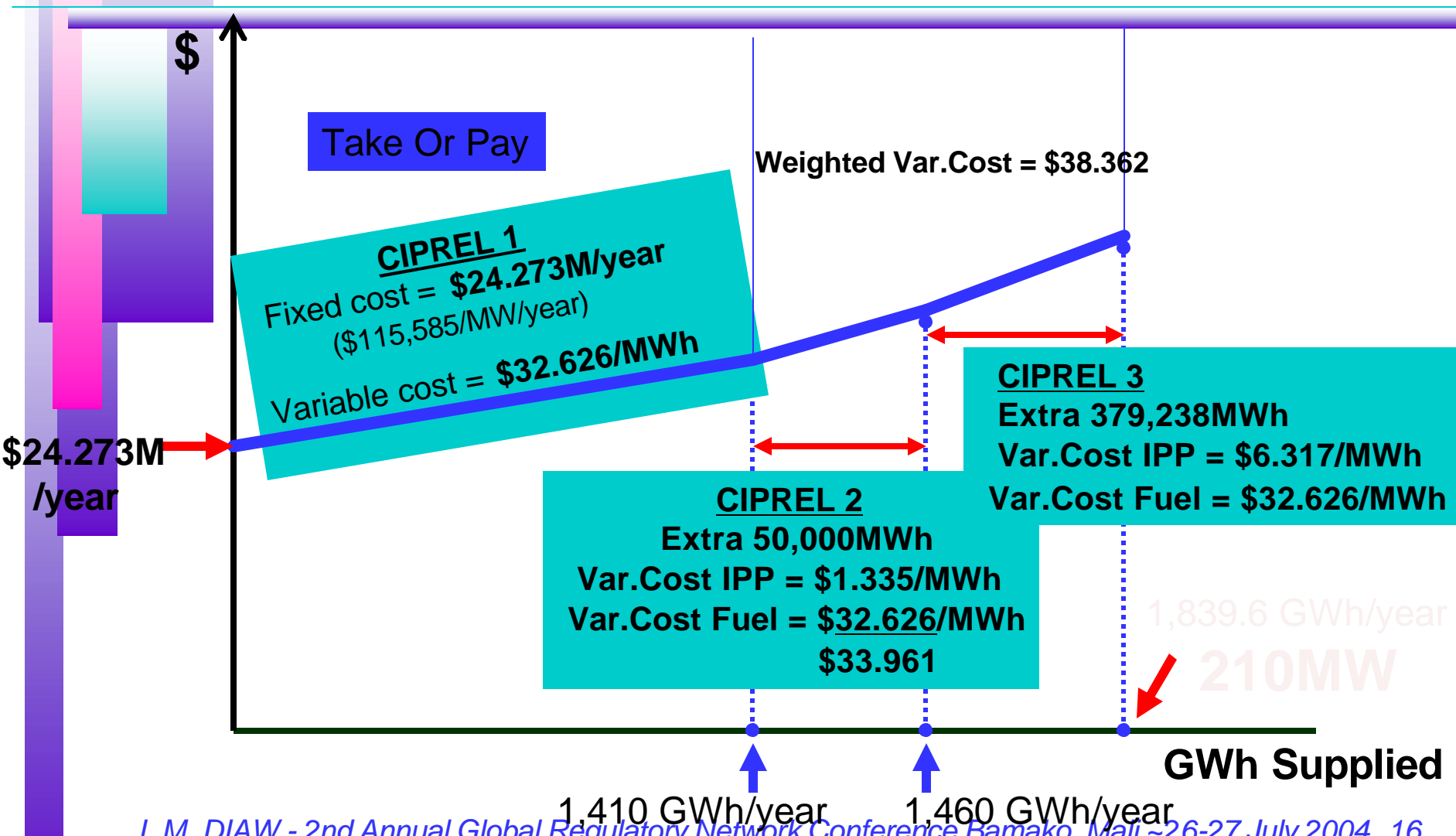
IPPs in West Africa

Case Study 2 : CIPREL -Cote d'Ivoire

- **Owners**
 - **Saur Int./ EDF/ Azito Holding (IPS, AKF)**
 - **Financial institutions(AFD, BOAD,IFC, PROPARCO)**
- **210 MW CC Technology operated by CIE**
- **19 years “Take or pay” contract with the Govt**
- **Gas contract guaranteed by the Govt**
- **Financed by equity and non commercial debt + Govt**



IPP Contracts in Cote D'Ivoire – CIPREL





IPPs in West Africa

Case Study 1 : GTI - Senegal

- **Owners**
 - **Greenwich Turbine Inc. (GE subsidiary)**
- **50 MW CC Technology**
- **15 years “Take or pay” contract with SENELEC guaranteed by the Govt**
- **Financed by equity and commercial debt + IFC & Other donors**
- **MIGA Garantee**

■ ***IPP PERFORMANCES***

- **Good O&M performances**
- **No major disputes**

■ *IPP CHALLENGES IN WEST AFRICA*

- **Transparent legal framework**
- **Risk Sharing**
- **Financial viability of buyers**
- **Access to large consumers**
- **Integration in the regional power market**
- **Implication of regional financial system**
- **Dominant position (overlapping implication of players)**



THANK YOU FOR YOUR ATTENTION