



FIRST ECOWAS-JAPAN BUSINESS FORUM

BUSINESS OPPORTUNITIES IN INFRASTRUCTURE

(Transport, Energy and Telecommunications Sectors)

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1. Why ECOWAS?

- Natural Resources
- Finance and resource
- Institutional & Capacity
- 2. Investment Opportunities
 - ECOWAS 5 year strategic plan
- 3. On-going Activities : Priority Interventions
 - Transport
 - Energy
 - ICT



Why ECOWAS?





- <u>Comprises 15 Member States:</u> (Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger)
- Population: Over 300,000 million



Why ECOWAS? 1. Natural Resources



A region well endowed with mineral resources and Attractive policies for private sector

- ECOWAS is rich mineral resources : Gold, Manganese, Copper, Bauxite, Iron, Zinc, Nickel, Phosphates, Diamond, Uranium, etc..
- **40%** of the world's Bauxite resources, **5%** for uranium
- Large world-class iron deposit, **4%** of the world's iron resources
- GOLD is the major foreign exchange earner of the sector accounting for 84% of the USD 8.5 billion from export in 2010, followed by bauxite, phosphate, uranium and diamonds
- Attractive national mining policies which strengthen foreign private sector investment.
- Sector guided by regional and international institutions has allowed the opening of a significant number of mining operations and results in significant weight in GDP and export earnings.





- Huge energy potential, in Hydropower (26,000 MW), Fossil fuels oil, gas, coal (30% of proved reserves for each oil and gas in Africa), Biomass, Solar (5 kWh/m2/day) and Wind energy (5-6 m/s), charcoal and Uranium
- Coastal Countries with unequally huge potential in Fossil fuel distrubuted within ECOWAS Region (Nigeria only have 98% of oil reserves of the region). The Traditional biomass consist of 80 % of domestic energy needs
- □ The access rate to energy is only 30% and 8% in rural area. The Electricity consumption per capita in the region is one of the lowest in the world (less than 150kWh per capita).Only 45% of the energy requirements of the region is satisfied.



Why ECOWAS? 2. Finance & Resources

- Adequate investment opportunities to finance infrastructure development especially in the transport and energy sub-sectors, caused by:
 - Government Counterpart budgets and prioritisation;
 - Adequate regional Policies, institutional, legal and regulatory frameworks to attract large regional and international private sector finance (through PPPs)
- Limitless potential for investment financing from the vast regional natural resource base
 - Adequate knowledge base of the true resource base



- Efficient Management Structures and Frameworks
 - Policy, legal and regulatory frameworks and processes.
 - Institutional structure and functioning;
 - Resources management and operational efficiency;
 - Requisite technical human resources for infrastructure development
- Limitless regional dimensions to national infrastructure development strategies
 - High national interest in regional infrastructure projects
 - Adequate technical capacity for regional infrastructure development and management
 - Project preparation and development





INVESTMENT OPPORTUNITIES



ECOWAS Strategic Plan

- The Infrastructure Department is guided by Goal 2 of the regional strategic plan, "To facilitate the development of infrastructure for the attainment of a Competitive Business Environment and Investment Capacities"
- Programmes, projects and activities are tailored towards achieving this goal to promote integration and support growth in regional trade and free movement.
- These projects are in tandem with continental infrastructure development agenda such as the African Union (AU), PIDA (Programme for Infrastructure Development in Africa) for which ECOWAS is the designated coordinator of projects in West Africa





5-year ECOWAS Strategic Plan: Infrastructure Development

- Reduce cost and enhance provision of infrastructure services
- Increase involvement of the private sector and public-private-partnerships in infrastructure development
- Secure adequate funding for infrastructure projects - facilitate member states access to funds, secure foreign capital and expertise
- Improve rural access to energy and energy services
- Focus on multimodal transportation systems to improve connectivity between member states



On-going Activities Priority Interventions



Infrastructure needed to make investment possible in hitherto "locked up" or underexploited resources or economic potential, for example in minerals, agriculture, tourism, manufacturing and processing industries









TRANSPORT





TRANS-West African HIGHWAY



Trans Coastal, Dakar-Lagos corridor missing links

(PIDA) Nigeria ; Benin ;Togo ;Ghana; Cote d'Ivoire; Liberia; Sierra Leone; Guinea Bissau; Guinea; The Gambia; Senegal

 Improvement of existing roads Boke(Guinee) – Quebo (Guinee Bissau), 112 km

Trans Sahelian - Dakar – Niamey-N'Djamena multimodal corridor (PIDA)

- Senegal 315 km
- Mali
 375 km
- Burkina Faso 109 km
- Niger 598 km





Missing Link Improvement

- Construction of bad sections on the Abidjan-Lagos Section World Bank
 - Phase I Ghana 110km; Benin 17km; Togo 8km. Supervision, Technical Assistance & Road Safety
- Rehabilitation of the Cotonou-Lome road AfDB

Construction of the Trans-Gambia Bridge – AfDB

- Construction of two roads in Senegal
- Construction of two Joint Border Posts (Senegal & Gambia)
- European Union 10th EDF Regional Indicative programme
 - Construction of the Bandajuma to the Moa river bridge (45,2 km) S. Leone-Liberia
 - Improvement/Construction of 3 bridges located over the Sewa, Waanje and Moa rivers in Sierra Leone
 - Construction of Zinder- Nigeria Border Road (Niger-Nigeria)
 - Koupela Piega-Fada Gourma-Niger Border (Burkina Faso-Niger)

ECOWAS-AUC-AfDB Champion Infrastructure Program

- Dakar-Lagos missing links Road
- Cotonou-Niamey-Ouagadougou-Abidjan railway links
- Dakar-Bamako-Ouangolodougou and Dosso(Niger)-Northen Nigeria railway links
- Sambagalou dam and interconnection lines OMVG
- Fomi multipurpose dam Guinea



Construction of Joint Border Posts (JBPs)



OBJECTIVES

- To enhance movement of persons, vehicles and goods within the Community joint controls in a single location
- To enhance the effectiveness of border controls

BENEFITS

- Average border crossing time reduced to 3 hours
- Clearances for buses and passenger cars halved
- Freight times reduced quite dramatically.
- Pre-clearance possible through information & equipment sharing

Update on the construction of the JBPs

Project Update

- Architectural and engineering designs completed
- Construction ongoing on three (3) sites: Nigeria/Benin border, Togo
 - Ghana and Benin Niger border.

Next Steps

- Secure funding for remaining JBPs
 - Bénin-Togo €16.00m
 - Ghana-Côte d'Ivoire €20.00m
 - Guinée-Mali €16.00m
 - Ghana-Burkina Faso €16.00m

- ECOWAS Regional Supplementary Act for JBPs submitted to ECOWAS Parliament
- Undertake study on detailed JBP operational procedures manuals customized for specific JBPs
- Undertake detailed baseline studies of existing borders controls to inform the development of modified manuals
- Undertake detailed training programmes for border control officials on the JBP scheme







AIR TRANSPORT- Projects

- Establishment of an Air Transport Legal Framework for ECOWAS region
 - Publish, awareness campaign and follow up of the implementation of the Air Transport Supplementary Acts to sustain a Community Air Transport Market
- Enhancement of Aviation Safety and Security
 - Pooling of resources for Civil Aviation Authorities (CAA) capacity building through an Unique Regional Aviation Safety Oversight Organization (RSOO) and a Regional Pool of Experts for Aviation Security Regional in ECOWAS region
- Facilitating of a Viable Airline Industry in the region
 - Projects for the viability of the airline industry such as Aircraft Leasing Company, Aircraft Maintenance Facility, Regional Air Transport Data Base, enhance airport infrastructure and the creation of ECOWAS Airlines cooperation (joint ventures, mergers, alliances, etc).
- Aeronautical Cooperation

Asia

 Implementation of the MoU of July 2012 with ECAC, the Technical Agreement signed on 17 October 2012 with WFP and Finalize draft Air Services Agreements with EU and Brazil.







OBJECTIVE

To enhance competitiveness of economy in the region by providing affordable transport costs for agriculture and mining products and goods. Master plan details
ECOWAS Railway Master Plan developed in 2009, identifying 17 priority links
Rehabilitation of 3,300 km existing railways
Construction of 6,700 KM of new lines

Update

Railway Route (Cotonou-Niamey-Ouagadougou-Abidjan Railway- 2,681 km)



Trans Coastal New Links

- Ilaro Pobé 23 km; Segbohoue - Aného 49 km; Lomé - Téma 147 km; Prestea - Abidjan 222 km
 Rehabilitation link
- Cotonou- Segbohoue 50 km
- Aného-Lomé-Blitta 334 km
- Dakar Bamako 1,150 km

Interconnection New links

 Blitta-Pama-Fada Ngourma-Ouagadougou **783 km**;
 Blitta- Sokodé-Fada GourmaNiamey **839 km**; Bougouni-Mandiana-Kankan **261 km**; Tambacounda - Dabola **646 km**; Man -Mandiana-Kankan **576 km**; Dimbokro -Diléya-Man- Sanniquellie **535 km**; Ansongo - Dori-Kaya **363 km**; Man -Diléya-San Pedro **399 km**

Next Steps

- Feasibility and detailed studies to be undertaken
- Funds Mobilization





Project Preparation & Development: Priority on-going Studies

- ECOWAN Study on market analysis and business model
- ECOWAS Regional Infrastructure Development Master Plan
- Lagos-Dakar Corridor missing links
- Development of airport infrastructure in West Africa
- Development of rural and peri-urban electrification in West Africa
- Development of a postal service Master Plan in West Africa
- Feasibility Studies for Railways new links
- Procurement of Construction Works: Joint Border Posts between Ghana and Cote d'Ivoire
- Study for Extension of gas pipeline project
- Feasibility study for Rural Electrification
- Study for ECOWAS Energy Policy
- Feasibility Study for new Joint border posts construction
- Feasibility study for the construction of the regional broadband infrastructure including right of way for landlocked countries to submarine cables





ENERGY

Under the implementation of this strategy, several institutions and agencies was created in the energy sector to complement the Commission's efforts

The West African Power Pool (WAPP)

 Established in July 2006, the WAPP is the specialised institution for identifying priority energy exchange projects aimed at increasing the region's autonomy in the energy sector. It is also responsible for mainstreaming national electricity grids into a regional electricity market and enhancing the sharing of regional energy resources through interconnections.

- It is endowed with an information and coordination centre.
- The WAPP has developed a Master Plan for energy generation, transmission and distribution 2012-2025 adopted in February 2012 by the Heads of States

Energy Infrastructure Projects	Number	Cost (USD Million)
Hydropower projects (7092 MW)	24	13, 803
Thermal power projects (2375 MW)	5	4, 263
Renewables energy projects (800 MW)	4	1, 893
Interconnection projects (16 000 km)	26	6, 457
TOTAL		26, 416
Constal Trans Blackbore Sub-program Inter-Zonal Trans Hub Sub-program Notth-core Trans Sub-program OMVGKOM/S Development Sub-program CLEG System Redevelopment Sub-program MALI SENEGAL GUINEA BISSAU GUINEA BISSAU CLEG LIBERIA		ER GERIA

Under the WAPP master plan, the priority projects are described in the table below :

Project Title	Status	Cost (Euros)
225 kV Guinea - Mali Interconnection	Pre-investment studies on preparation with funding from the ADB, Planned to be completed in December 2015.	286 millions
225 kV Ghana - Burkina Faso - Mali Interconnection	The additional pre-investment studies are being financed by the Fund Fudiciare EU-A through AFD and will be completed in March 2016	213 millions
330 kV Nigeria-Niger – Benin/Togo-Burkina Faso Interconnection Project	 A feasibility study was prepared in 2007. The update of these studies is in progress on NEPAD-IPPF funding and will be completed in July 2016 	490 millions
330 kV Nigeria – Benin Interconnection Reinforcement Project	Pre-investment studies will begin during first Quarter 2016, be finances by IPPF- NEPAD	43 millions



Under the WAPP master plan, the priority projects are described in the table below :

Project Title	Status	Cost (Euros)
280 MW Hydropower project Koukoutamba Guinée	 Feasibility studies are finalized Tender document are developed Recruitment of the consultants for the complementary studies for roads and environmental impact studies are on going and financed by AfDB 	700 millions
450 MW Maria Gleta Power Generation Facility (Benin)	 A private developer was selected through a international tender Feasibility studies are underway and are scheduled for completion in June 2016 	652 millions
450 MW Domunli Power Generation Facility (Ghana)	 A private developer was selected through a international tender Feasibility studies are underway and are scheduled for completion in June 2016 	652 millions



- The West African Gas Pipeline (WAGP)
 - Transport natural gas from Nigeria to Benin, Togo and Ghana for the power generation and industrial needs
 - Started in 2005, the first operation begins in 2011
 - 678 km of length, with a capacity of 478 Mbtu/day



Extension of the gas pipeline network to ECOWAS others countries costal and inland

□ Feasibility Studies are underway and to be completed in august 2016

Opportuny for the construction of the gas network extension and gas supply in the network



- ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)
 - The ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) was established at Praia, Cape Verde in July 2010 to develop the regional market for renewable energy and energy efficiency with the aim of increasing access to modern energy services and security that is environmentally benign.
 - In the strategic plan for development of renewable energy in 2020, we identified 60 projects sites (wind, photovoltaic, biomass and hydraulic pico-micro) with a total potential capacity of 3600 MW for a financing need is about 1500 million US dollars.
 - Objectives are to increase the contribution of Renewable Energy (included large hydro) in the global energy mix to 35% in 2020, and 48% in 2030



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The priority projects of ECREEE under the master plan

Project Title	Status	Cost (Keuros)
Biomasse plant 6MW Benin – Euro Negoce Industrie	Feasibility achieved, development phase	15,000
Competititive Boot 1, 10 MW PV Burkina Faso	Feasibility achieved, development phase	20,000
Brava 100% Renewable (wind and solar) 3,45 MW Cap vert	Pre Feasibility stage	19,916
Bandama HydroPower 44 MW, Côte d'Ivoire	Feasibility achieved, development phase	110,000
12 MW Solar PV Gambia	Feasibility phase	24,000
6MW Biomass based power generation project, Ghana	Pre Feasibility phase	18,000
Hydroelectric plant Salthino, 19 MW Guinea Bissau	Pre Feasibility phase	57,475



Project Title	Status	Cost (Keuros)
20 MW Solar plant Khoumaguély (Kindia) Guinée	Pre Feasibility phase	40,000
Mein Small hydro unit 1,5 MW Liberia	Feasibility phase	3,600
50 MW Solar PV plant Mali	Feasibility achieved, development phase	100,000
20 MW Solar PV Plant Niger	Feasibility achieved, development phase	40,000
Small-Scaled Off-Grid and -Mini-Grid Solar Project, 17,8 MW Nigeria	Pre Feasibility phase	73,957
150 MW wind plant Taiba Ndiaye, Senegal	Feasibility achieved, development phase	244,275
6 MW Solar park Freetown, Liberia	Feasibility achieved, development phase	13,846
5 MW PV Togo	Feasibility achieved, development phase	10,000



- Development of rural and peri-urban electrification in west africa
 - To develop a master plan at short, medium and long term for the development of rural and periurban electrification for the 15 ECOWAS countries taking into account the countries specificities and the various technological options.
 - Creation of a regional coordination mechanism for the implementation of the master plan and speed up the rural and periurban electrification in the region.
 - Studies are ongoing and will be completed in first quarter 2016.

OPPORTUNITY FOR PRIVATE SECTOR TO PARTICIPATE TO THE DEVELOPMENT OF RURAL ELECTRIFICATION BY NEW MECHANISM OF PARTENARIAT



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- Support Capacity building / Reopening of the Interafrican Electrical Engineering College (IEEC)
- $_{\odot}\,$ Created in 1979, the college was closed in 2000.
- Provide electricity companies immediately operational graduates engineer.
- Encourage and promote inter-regional cooperation through the mixing of students from many African countries as part of a bilingual teaching English / French.
- Investment cost : 2 300 000 Euros.

Opportunity to contribute to the training of youth african to meet future energy challenges and contribute to the development of a research and technological excellence center in the energy sector in Africa







Information & Communication Technology (ICT)





ICT - ECOWAN Project

ECOWAS WIDE AREA NETWORK (ECOWAN) public sector egovernance computer network, connecting all ECOWAS institutions, Governments and affiliated organizations. Cost - US\$130m

Benefits to ECOWAS

- Enhance knowledge sharing and regional integration
- Secure communication, administration and financial transactions portal.

The Project comprises:

- Fibre-optic connectivity within a country (Middle Mile connectivity)
- Cross-border connectivity
- Last Mile (end-user) connectivity
- Capacity building
- Core Applications to be deployed
 - THE REGIONAL CONTROL, COMMAND AND

COMMUNICATION (R3C) – The connectivity of the Heads of State and Government, Foreign Affairs ministries, ECOWAS Institutions and fee paying applications

- ALISA Customs connectivity and transaction support
- **RVAIS** Regional Vehicle Administration Information system
- WAMI connectivity for national central banks enabling real-time financial transaction support

Update

- The Gambia and Sierra Leone have both signed loan agreements with the Islamic Development Bank (IsDB) for the implementation of the project.
 - IsDB has also indicated interest to finance the implementation project in other IsDB member countries





ECOWAN Project Implementation plan



•••• CV-Senegal-Mali-Cote d'Ivoire link





Future Prospects

With the abandonment of

- i. water resources;
- ii. increasing GDP;
- iii. high Agricultural yields;
- iv. Politically stable énvironment
- v. Accessibility to the World (especially Asia); and
- vi. Established Transport (Roàd, maritime and Air) , Energy, and ICT Policies

The prospects of investing in the ECOWAS region is massive considering the *Infrastructural requirements* needed on the Regional and National Levels to improve the living condition of the people in the region.

Thank you Je vous remercie Muito Obrigado

