

|| Bumbuna Phase II Hydroelectric Project ||

Presentation to Sierra Leone Trade and Investment Forum
by
Andrew Cavaghan - CEO Joule Africa



Park Lane Hotel – London

25 February 2016



Joule Africa Limited

- Developing Bumbuna II since 2011 and bought out previous partner, Endeavor Energy, in January 2016
- Privately owned Power Project Developer, focused on Africa
- Management team has over 100 years experience in building large scale infrastructure and power projects (11GW) valued at over \$15bn
- Long term investor, owner and operator - Independent Power Producer (IPP)
- Almost 1GW of power projects in active development
- Headquartered in London
- 23 staff (with two thirds in Africa)
- 66 shareholders



- Secured Strategic Equity Backing from African Infrastructure Investment Managers (AIIM) in 2014 - (\$1.2billion funds under management)

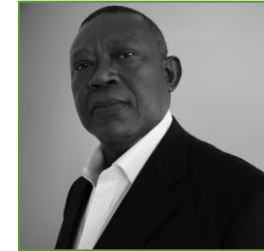


AFRICAN INFRASTRUCTURE INVESTMENT MANAGERS



Development Process

- Strong partnership with local team since 2011
- \$28.5m invested to date in Bumbuna Phase II HEP
 - Feasibility and Design (2011-13)
 - Geotechnical investigation (2014)
 - Environmental and Social (2011-16)
- Competitive International Tender of Construction contract (2013-2016)
- Collaboration with GoSL in designing phase II
 - Joint Steering Committee (2012-16)
 - Technical assistance from advisors – EUAITF and TAF funding, arranged by EAIF
- Active engagement with and support for local communities



Patrick Olu Beckley, Country Director



Abubakarr Kamara, Associate Director



Private Infrastructure Development Group



European Union Africa
Infrastructure Trust Fund



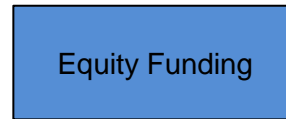
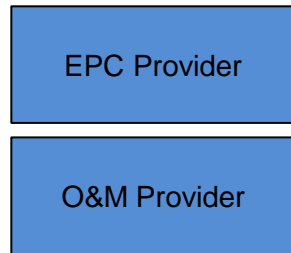
BUMBUNA PHASE II

Funding of Construction

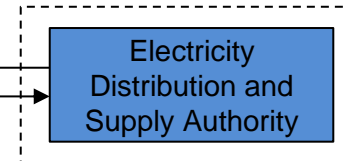
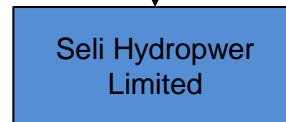


AFRICAN INFRASTRUCTURE INVESTMENT MANAGERS

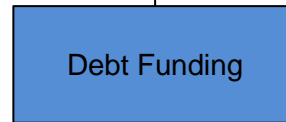
1) Construction company builds power plants on a lump sum, turnkey basis paid for by Equity and Debt investment



2) Invest Equity finance (\$200m-\$250m) to receive a long term return on investment



5) New Operations and Maintenance company operates power plants to international standards



4) Project company sells Power Capacity to national utility to pay operating costs, repay debt and provide a dividend stream to investors

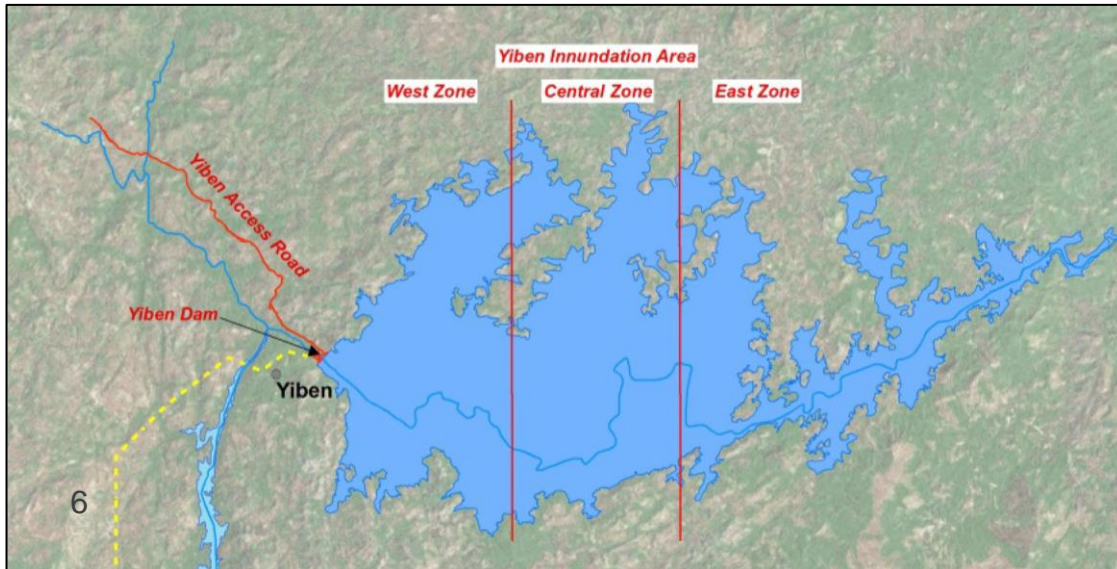


3) DFI lenders provide long term debt (15-20 years) to reduce cost of tariff (\$550-\$650m)



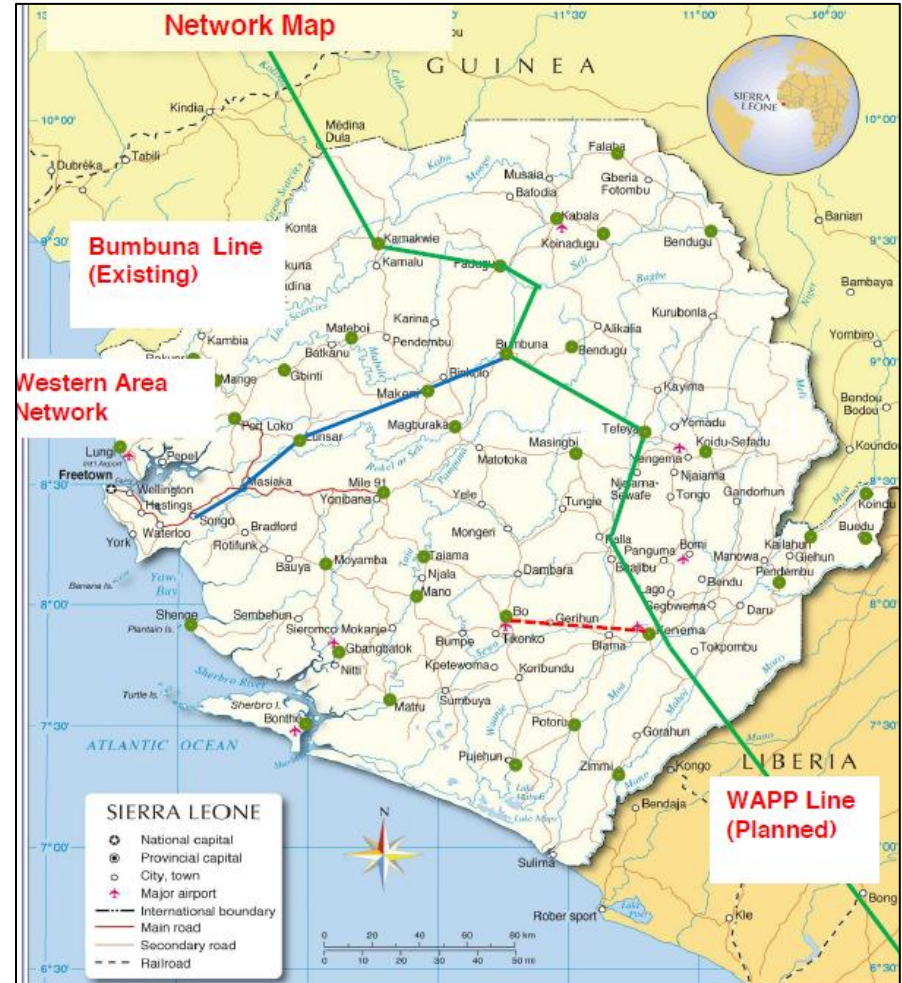
Environmental & Social Impact

- Five years of active engagement and sensitisation with local communities
- Developing Resettlement Action Plan to IFC Performance Standards
- Project will bring development and employment to the local region:
 - Local employment during construction ~2500
 - Local employment during operations ~150
 - Significant local supplier input during construction and operation

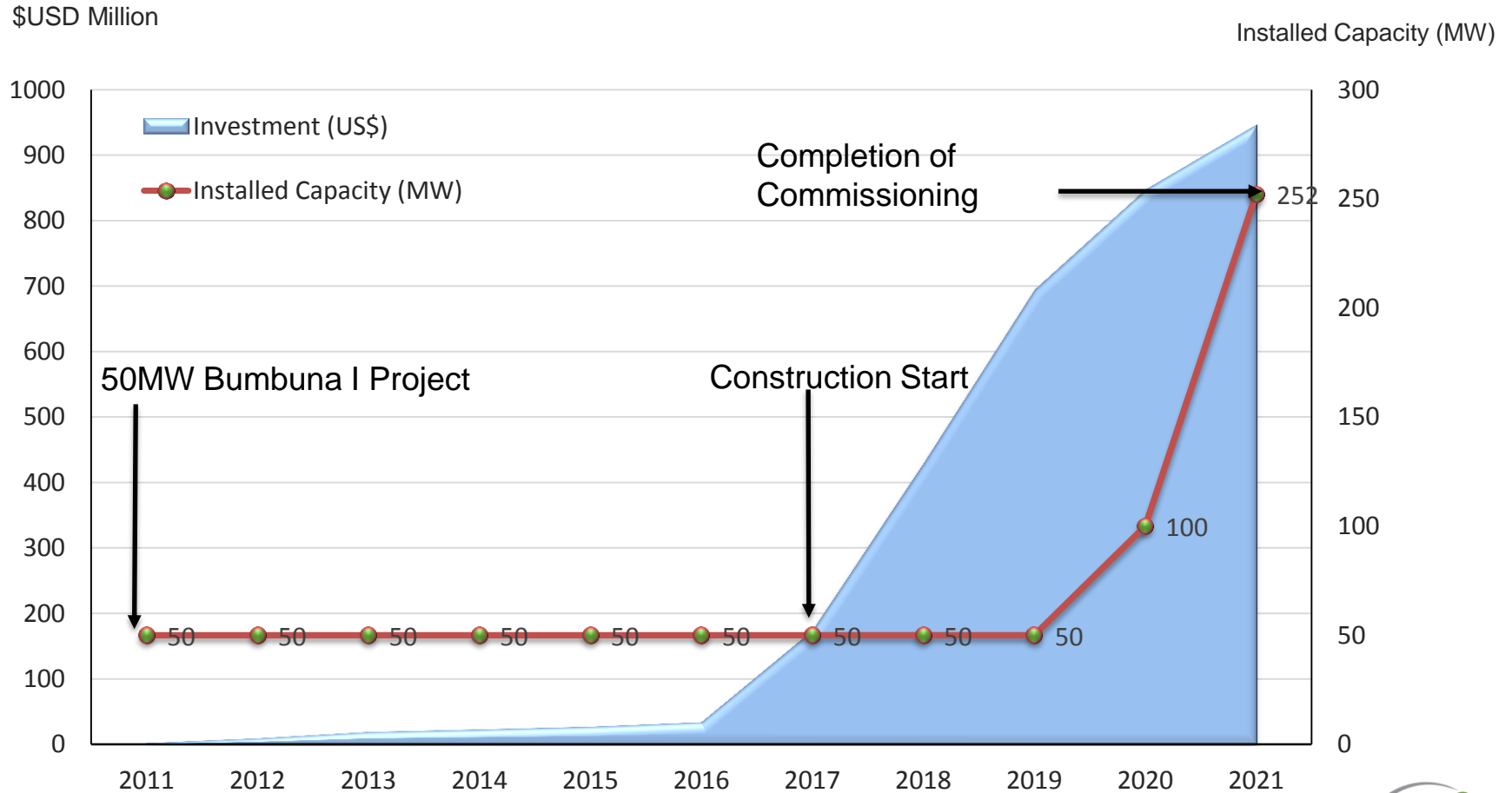


Impact on Sierra Leone Power Sector

- New Installed capacity – 202MW
- Year-round power of 75MW (in addition to Bumbuna HPP)
- All energy to be used by the national utility (EDSA)
- Interconnecting through planned power lines:
 - New 225kV line to Freetown via Port Loko
 - Interconnection line between Cote d'Ivoire, Liberia, Sierra Leone and Guinea
- **Significant donor investment in Transmission and Distribution (including pre-pay meters) to ensure more Sierra Leonians are connected to the grid**



Timeline to Project Completion



QUESTIONS?

