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Case Study: Cape Verde Wind Farm PPP Project

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Overview



- 1. Background
- 2. Scope
- 3. Environmental Impact
- 4. Stakeholders
- 5. Development and Implementation
- 6. Conclusions

1. Project Background

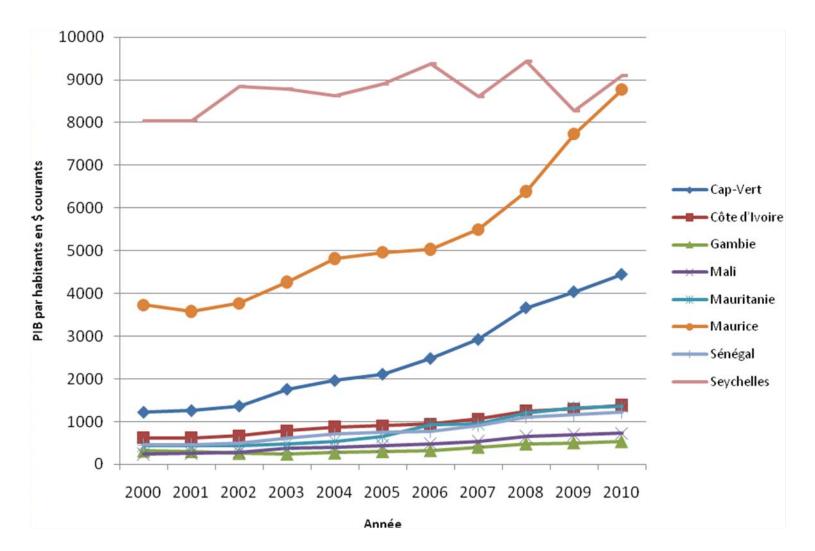


- •Population 500,000
- •9 inhabited islands
- •Dependent on imports
- •High cost of utilities
- •6% avg. economic growth
- •FDI and remittances





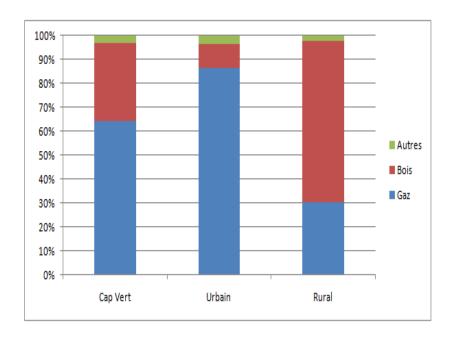






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- 45% of population inhabit rural areas
- 65%: access to electricity
- Composition of alternative fuels (2006)





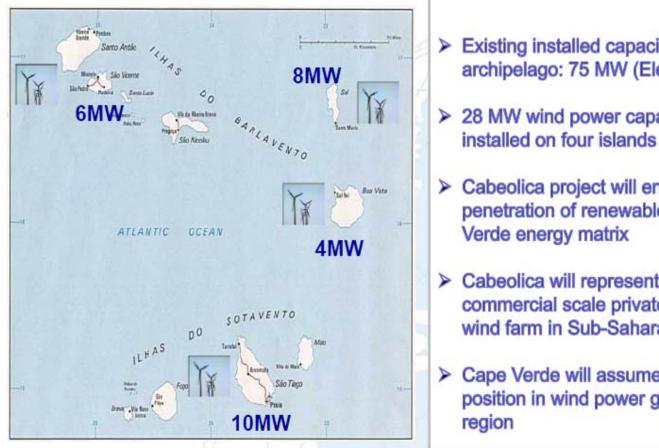
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Cape Verde's vision:

- Eliminate dependence on fossil fuels
- Security of supply
- Sustainability
- Efficiency

2. Project Scope

- Development, construction, and operation of four windfarms and transmission infrastructure
- Project cost: EUR 63.2 million



- Existing installed capacity in the archipelago: 75 MW (Electra)
- 28 MW wind power capacity to be
- Cabeolica project will ensure high penetration of renewable energy in Cape
- Cabeolica will represent the first commercial scale privately financed PPP wind farm in Sub-Sahara Africa
- Cape Verde will assume leadership position in wind power generation in the

3. Environmental Impact Analysis

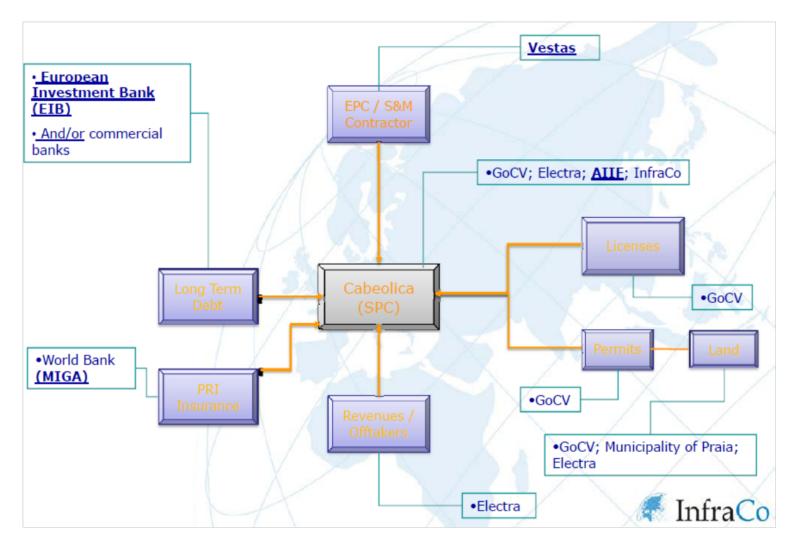


General view of the study area showing trees of Prosopis julifora and Calotropis procera. A) North-South valley; B) East-West valley, S. Vincente



Dorsal and lateral view of the endemic gecko subspecies of S. Vincente Island, Tarentola caboverdiana substituta

4. Project Stakeholders



Final structure



<u>Shareholders:</u> GoCV 18% Elektra 11% InfraCo 71%

<u>Sub-Loans:</u> **Finnfund:** EUR 8m **AFC:** EUR 8.1m **InfraCo:** EUR 2.1m (sub-loan)

<u>Senior Loans</u> EIB: EUR 30m AfDB: EUR 15m



5. Project Development & Implementation - key issues

- Land use agreement
- Procurement
 OJEU publication
- Turnkey EPC contract
- Lender's engineer
- Power purchase agreement (PPA)
 - Take or Pay
 - LT bankability?

PPA Risk Allocation





Project Development & Implementation
key issues (cont'd)

- LT Service agreement
 - Maintenance and availability guarantee
 - Fixed price O&M
- DSRA
 - Government fall-back
- Dividend lock-up



6. Conclusions



- The <u>project</u> will set a <u>precedent for Public Private</u> <u>Partnership</u> in the infrastructure sector in Cape Verde and create an opportunity of replication across the industry and the region.
- The project will allow Cape Verde to reach its renewable energy penetration target and will reduce dependency on foreign oil imports.
- For the project to be constructed and financed among others – an effective EPC solution, a bankable PPA, the support of the GoCV and appropriate land agreements needed to be arranged between all stakeholders





Thank you !

