

## Western Africa Solar Insights - Chapter1

Our current experience of western African countries: - Had visited 4 countries recently during April 2021 which are part of western Africa namely Senegal, Mali, Guinea (Conakry) & Cape Verde. Some of the interesting observations are as follows:

- 1). Specific Solar Production observed through simulation from PV Syst as ~ 1850kwh/kWp/year which is averagely higher by ~20 to 25% than India/Myanmar (the calculated Specific Yield is ~5+kwh/kWp/day)
- 2). The National Grid Tariff for the highest consumption bracket varies from \$0.20 to \$0.28 per kWh for the Commercial & Industrial customers (~\$0.28 per kWh prevailing in Cape Verde)
- 3). The Diesel price was varying from \$1.3 to \$1.5 per litre which could be estimates as equivalent of levelized cost of energy (LCOE) of \$0.30 to \$0.35 per kwh
- 4). The ocean shipping options are also available as: Dakar port for Senegal, Conakry port for Guinea, Sao Vincent port for Mindelo (Cape Verde) & Dakar/Conakry port for Mali (+1000km road transport to Bamako)
- 5). The key Solar materials are generally exempted from Basic Custom Duties (BCD) namely PV Modules & Solar Inverters (Batteries are also exempted from BCD in Mali)
- 6). No export of Solar Generation to the National Electricity Grid is being permitted in all these countries visited thus could be utilized for captive consumption only (Behind the Energy Meter).

**More to Follow**