

RENEWABLE ENERGY OPPORTUNITIES IN BOTSWANA



 A Botswana based company, developing **income generating renewable energy projects** in selected SADC(SAPP)countries with **current** footprints in **Botswana and Zimbabwe**

 Converted to public company and pre-listing approval on **Botswana Stock Exchange** granted in 2017.

 **Niche Project Sizes & carefully selected market:**

- **Small Grid Tied projects (1MW-40MW)** with attractive **tariffs**,
- **Off Grid** solar solutions serving Schools, Healthcare Centers, Mines/Corporates
- delivering **sustainable cash generation** that meets investor return objectives

BOING BUSINESS IN BOTSWANA

- ❖ Sustained economic growth, with 5% annual growth over the past decade.
- ❖ **GDP** (PPP) of approx. USD40 Billion
- ❖ Lowest **Corruption Index** in Africa
- ❖ Ease of doing business commendable
- ❖ Deep capital markets
- ❖ **A-** with stable outlook by S&P
- ❖ Mining sector contributes on average 24% of GDP



SPECIFIC OPPORTUNITIES: IN COUNTRY

- ❖ Botswana Power Corporation (**BPC**) monopoly position
- ❖ Installed Capacity(2016) approx. **892MW** ~100% fossils
- ❖ Electrification Rate 2014: 53%
- ❖ **Rural Electrification** Rate: 32%

FORECAST SUPPLY – DEMAND BALANCE (2018-2027) BY BPC

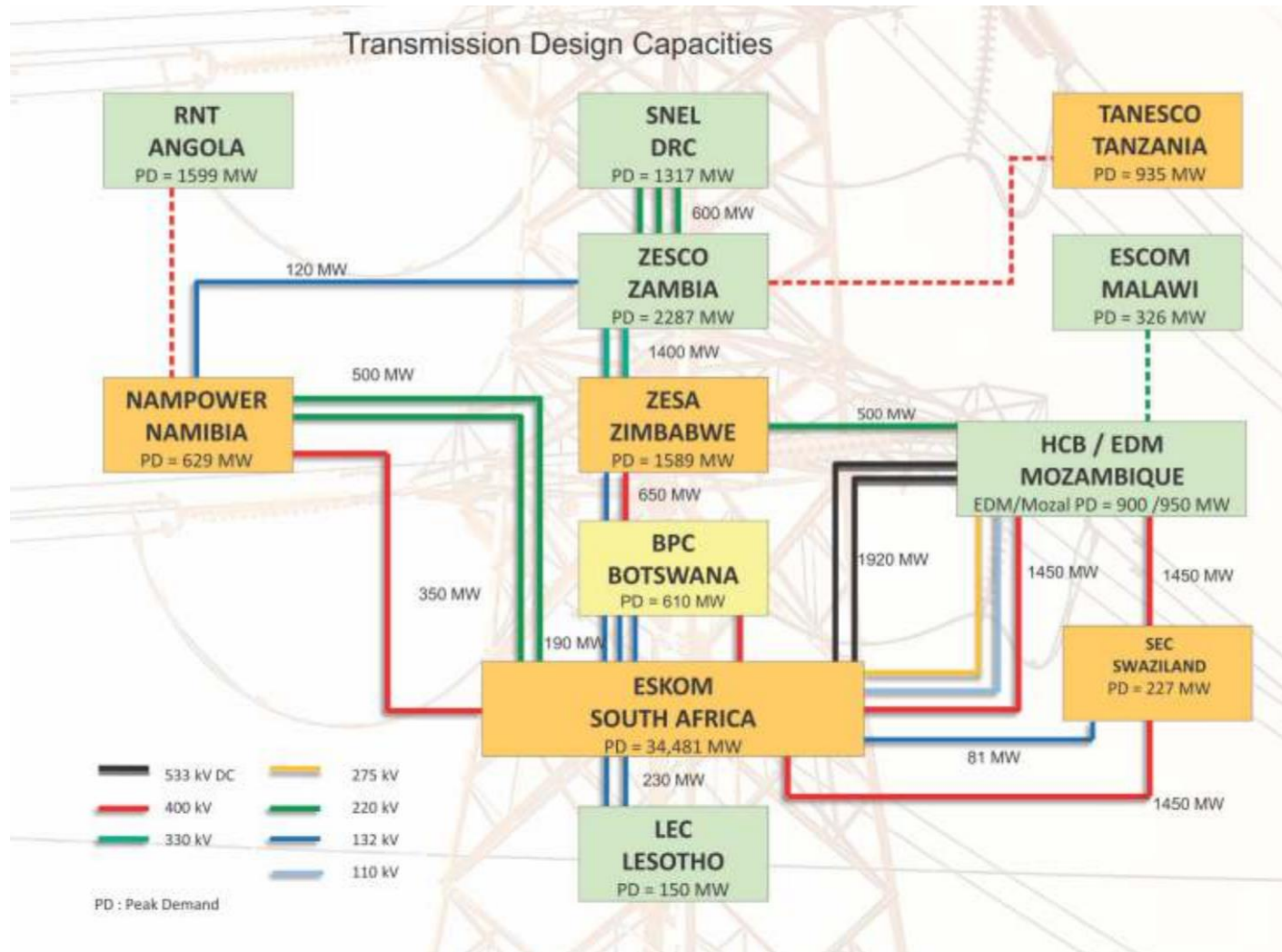
Source	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Morupule A	116	116	116	116	116	116	116	116	116	116
Morupule B (1-4)	390	390	390	390	520	520	520	520	520	520
Diesel Emergency	160	160	160	160	90	90	90	90	90	90
Solar 100MW (With Storage)	0	100	100	100	100	100	100	100	100	100
Imports	150	150	150	150	150	150	150	150	150	150
Total Supply	816	916	916	916	976	976	976	976	976	976
Peak Demand	613	641	671	701	734	768	803	840	878	919
Balance (+/-)	203	275	245	215	242	208	173	136	98	57

- ❖ **Imports** still significant
- ❖ Emergency Plant continues until the 15% reserve margin is attained through new generation capacity
- ❖ **Electricity demand** estimated to grow to approx. 1, 523 MW in 2035

Sources: BPC, RECP

SPECIFIC OPPORTUNITIES: REGIONAL POSITIONING

SAPP GRID 2016/17



Source: SAPP

- ❖ **Grid interconnectivity** within SAPP advanced per adjacent table.
- ❖ Zimbabwe - Zambia – Botswana – Namibia Interconnector (**ZIZABONA**)
- ❖ **Massive landmass** to accommodate bigger Solar PV or CSP.
- ❖ Best belts in SADC in terms of **Irradiance**
- ❖ Competitive pricing as Countries have more options
- ❖ Botswana gaining **Center Power** status



INVEST**SOLAR**

AFRICA

INVESTMENTS | DEVELOPMENT | MAINTENANCE



www.investsolarafrika.com



Acumen Park
Plot 50370, Fairgrounds
Gaborone, Botswana

Ainos Ngadya
Co-Founder and Chief Executive
Officer
Invest Solar Africa
ainos@investsolarafrika.com