



SAARC Training Workshop on Financial Modeling for Renewable Energy Projects

Managing the Variability of Wind and Solar Through Innovative Technological Solutions

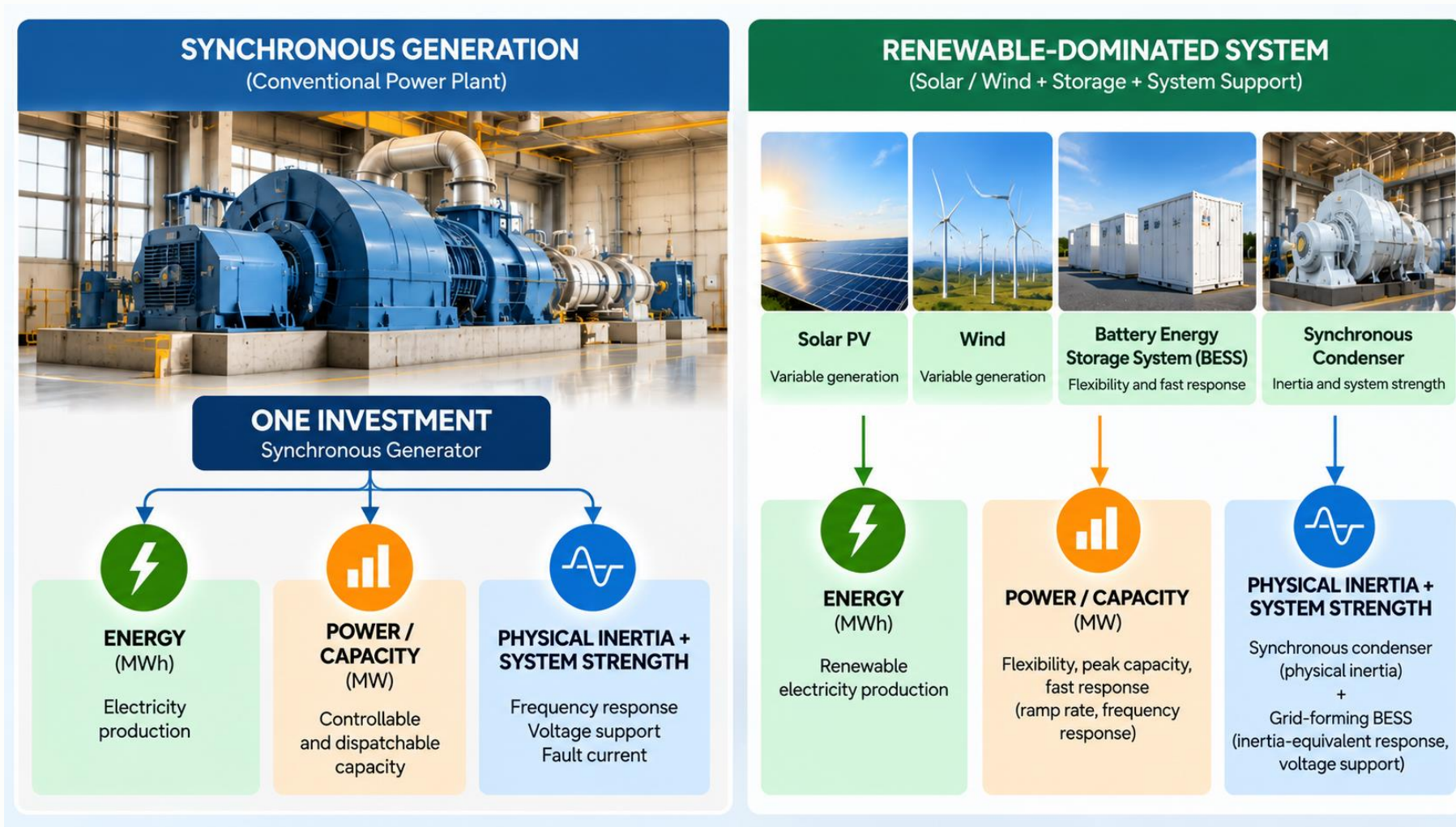
Dr. Narendra De Silva

B.Sc(Hons.), DEPS(Norway), PhD(UK), LLB, FIET, MIESL, C. Eng, SMIEE

General Manager, Lanka Electricity Company (Pvt) Ltd.

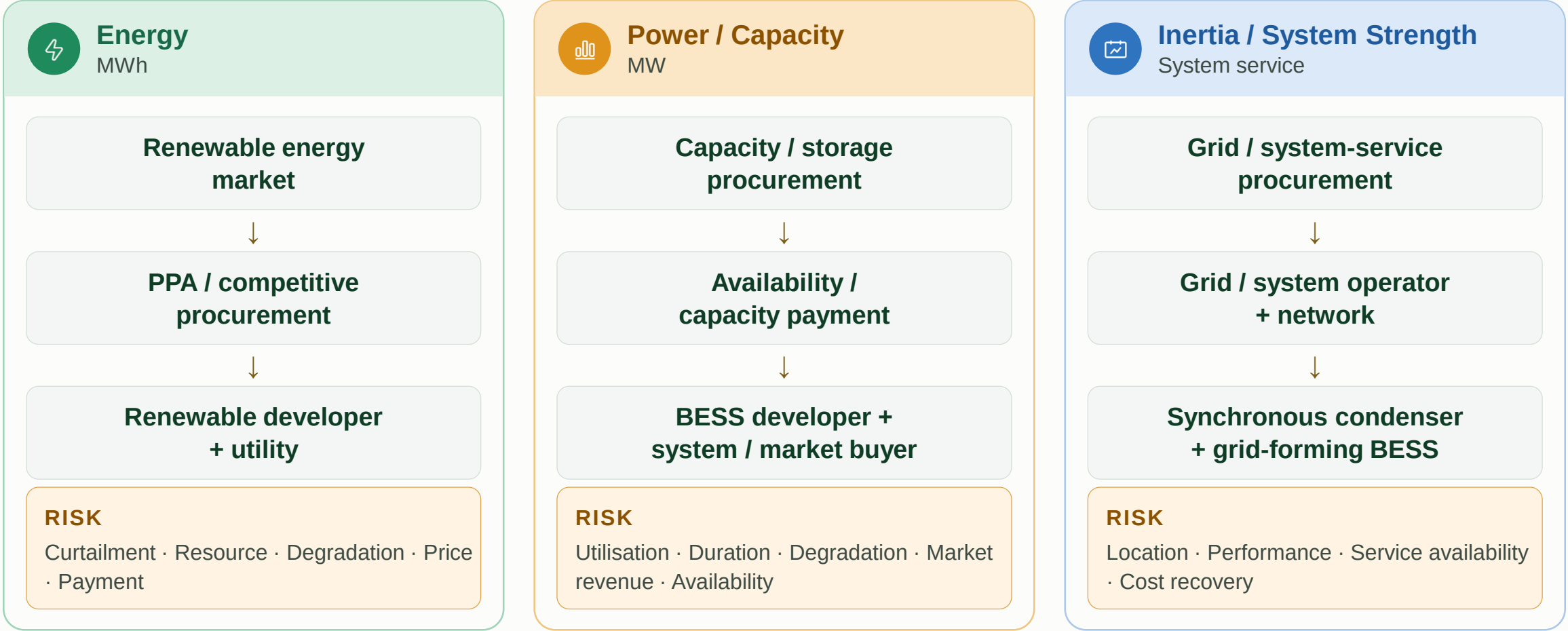


One Generation Package vs Three System Requirements



Renewable investment is an investment in a portfolio of system services, not energy alone.

From Technology Procurement to Service Procurement



Objective is to minimise total system cost and risk, not the cost of one technology in isolation.

Financing the Portfolio

Integrated System Investment Plan Energy • Power • Grid Services

**Energy**
MWh



- Curtailment arrangement
- Renewable energy procurement
- PPA / Energy market

**Power / Capacity**
MW



- BESS investment
- Capacity / availability
- Peak supply
- Fast response

**Grid Services**
System



- Synchronous condenser
- Synthetic inertia
- Voltage / system strength
- Fast frequency response



Thank you.

Dr. Narendra De Silva

General Manager, Lanka Electricity Company (Pvt) Ltd.