

# COMMERCIAL SOLAR PV ENERGY SOLUTIONS



**GRID-BACKUP**  
**GRID-INTERACTIVE**

**GRID-TIE**  
**OFF-GRID**

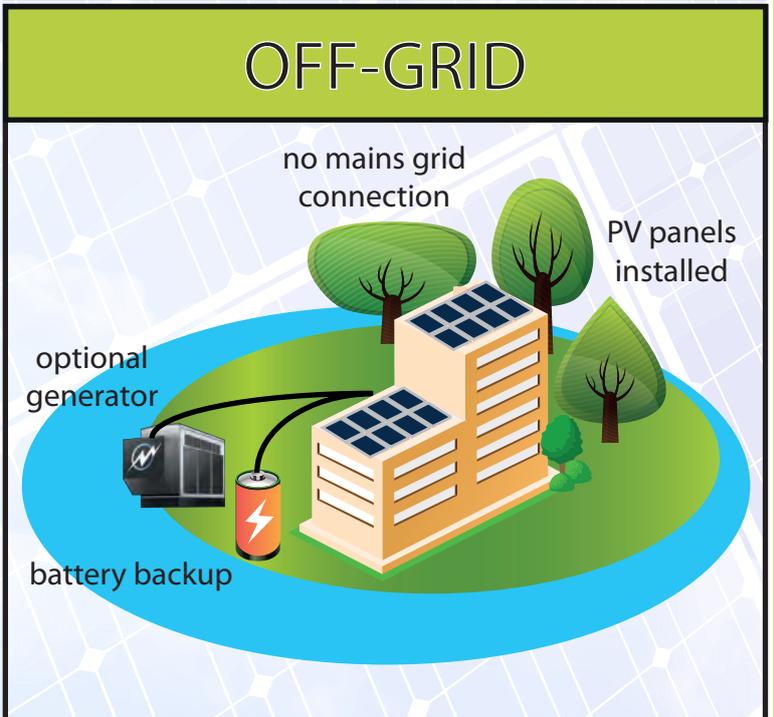
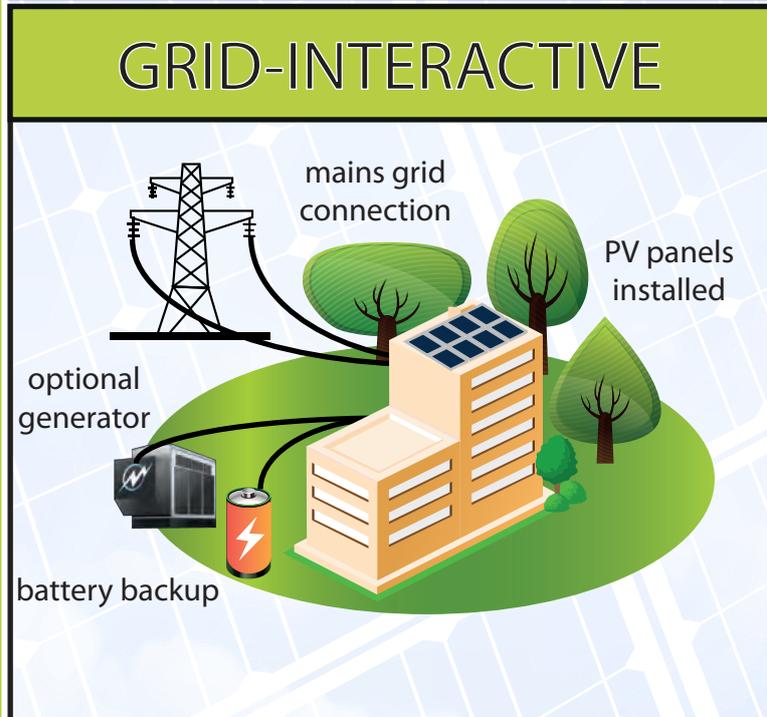
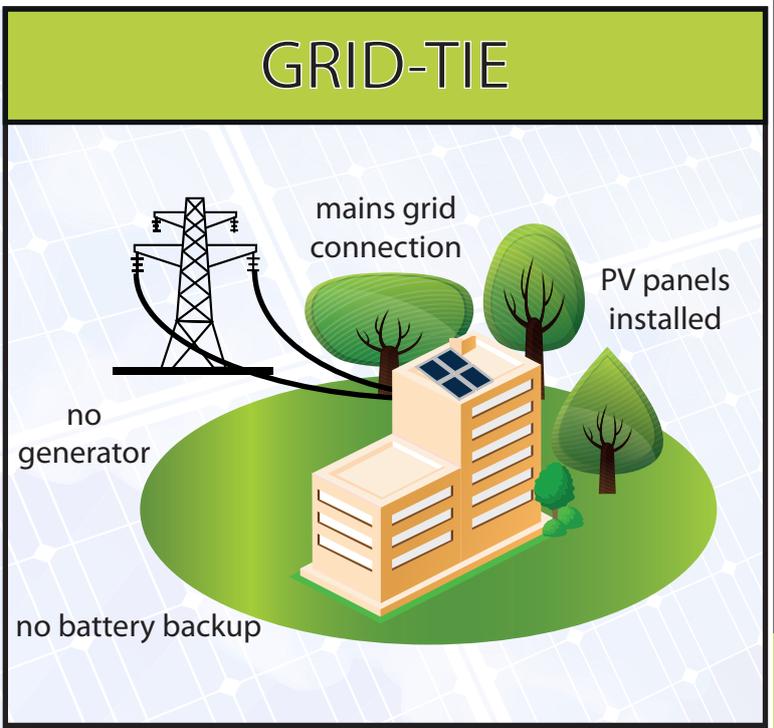
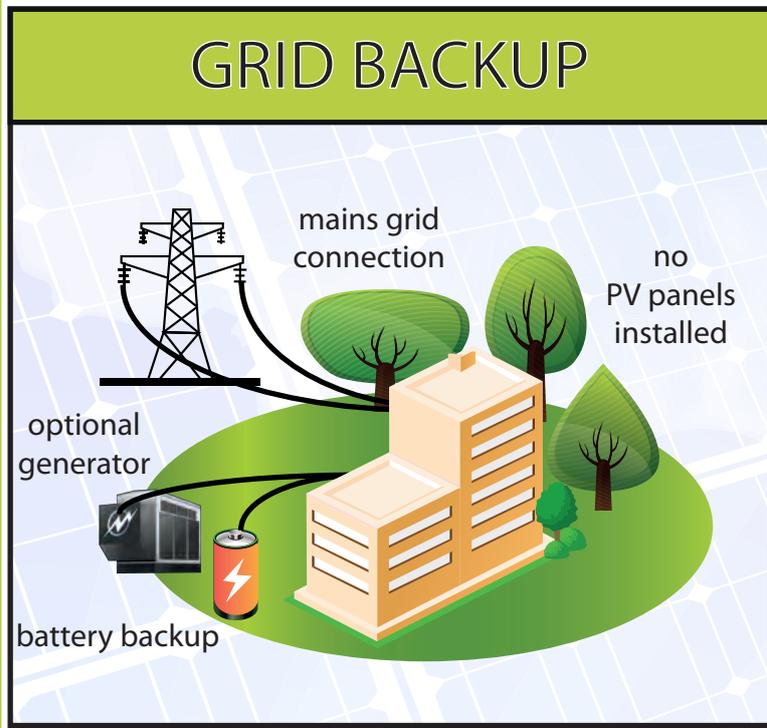
PHOTOVOLTAIC PANELS, GENERATORS, BATTERY BACKUP, HYBRID SYSTEMS, ENERGY METERING

APPLICATIONS:  
ROOFTOPS, CAR PORTS, FREE-STANDING STRUCTURES, RANGE FROM **10kW TO 300kW**

BENEFITS:  
PROTECTION OF ELECTRICAL AND ELECTRONIC EQUIPMENT, ELECTRICITY COST SAVINGS, CONTINUOUS POWER DURING LOAD-SHEDDING

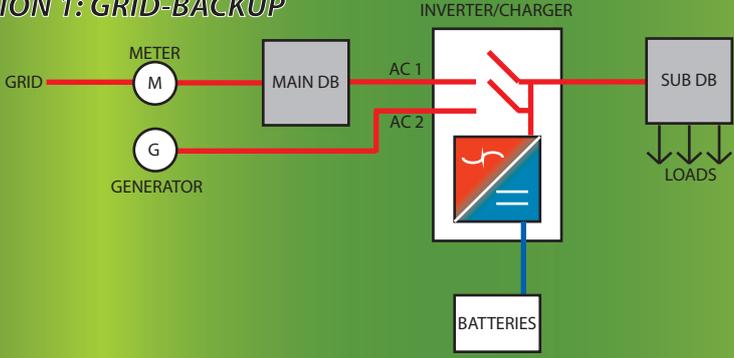
VALUE ADD:  
ENGINEERING SIGN-OFF, ELECTRICAL CERTIFICATE OF COMPLIANCE (COC), LOAD MANAGEMENT & AUTOMATIC SWITCHING, ONLINE MONITORING AND DATA LOGGING.

## OPTIONS:



## DESCRIPTION OF OPTIONS:

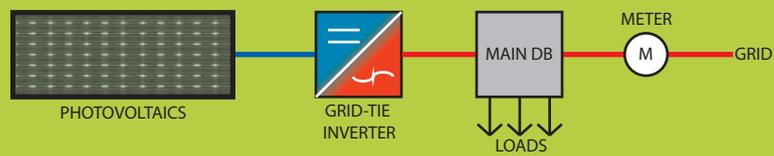
### OPTION 1: GRID-BACKUP



### OPTION 1: GRID BACKUP --> BENEFITS

1. SECURITY FROM GRID OUTAGE WITH RELIABLE BATTERY BACKUP AND SEAMLESS SWITCHOVER (REDUCE IMPACT OF LOAD-SHEDDING).
2. INTEGRATE DIESEL GENERATOR FOR LONGER AUTONOMY.
3. NO PV PANELS.
4. POWERFULL LOAD STARTING CAPABILITIES OF INVERTER.

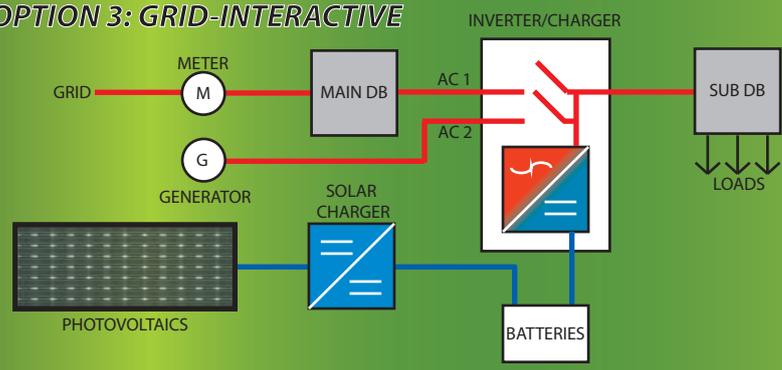
### OPTION 2: GRID-TIE



### OPTION 2: GRID TIE --> BENEFITS

1. REDUCE ELECTRICITY BILL.
2. NO BATTERIES
3. MINIMAL INDOOR SPACE REQUIREMENTS.

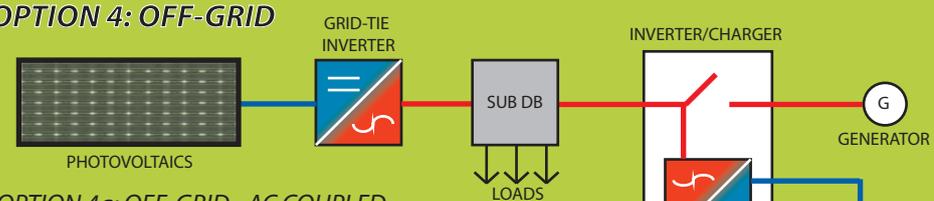
### OPTION 3: GRID-INTERACTIVE



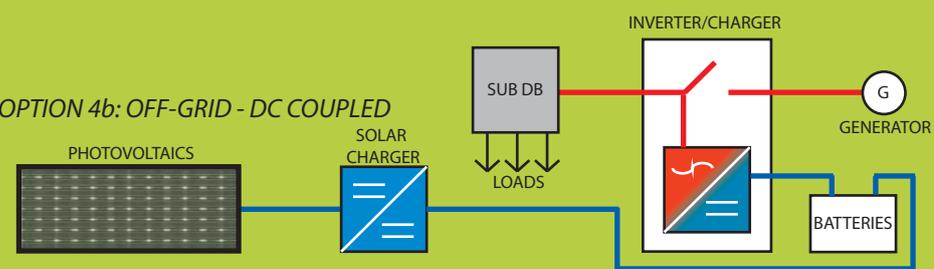
### OPTION 3: GRID INTERACTIVE --> BENEFITS

1. REDUCE ELECTRICITY BILL.
2. PRIORITIZE CONSUMPTION OF SOLAR POWER.
3. SECURITY FROM GRID OUTAGE WITH RELIABLE BATTERY BACKUP AND SEAMLESS SWITCHOVER (REDUCE IMPACT OF LOAD-SHEDDING).
6. POWERFULL LOAD STARTING CAPABILITIES OF INVERTER.
7. INTEGRATE DIESEL GENERATOR FOR LONGER AUTONOMY.

### OPTION 4: OFF-GRID



#### OPTION 4a: OFF-GRID - AC COUPLED



#### OPTION 4b: OFF-GRID - DC COUPLED

### OPTION 4: OFF-GRID --> BENEFITS

1. NO ELECTRICITY BILL.
2. INDEPENDENT FROM EXTERNAL ENERGY SUPPLIES.
3. POWERFULL LOAD STARTING CAPABILITIES OF INVERTER.
4. AC COUPLING WHEN PV ARRAY FAR FROM BATTERY BANK.
5. OPTION TO INTEGRATE DIESEL GENERATOR.

Energy Insight provides the total solution for sizes ranging from **10kW to 300kW**, from site measurement and assessment, designs and simulations (Cost and Space Optimization, shading analysis, etc.), proposals (including ROI), supply and installation.