

Distributed PV Generation with Zero Feed-in

The Concept of Net Metering

Grid-Connected Solar PV Block Diagram

NET METERING & DISTRIBUTED GENERATION

KEY DECISIONS IN GHANA'S NET METERING CODE

Consentation for net-metering generation	None (N/A)	Eligible renewable technologies	M
Monthly net-metering generation rollover arrangement	Rolled over in following month	Customer classes that can participate	All
Annual net-metering generation rollover arrangement	Ends at end of the calendar year to begin	Utilities that must offer net metering	ECG & NEDCC
Individual net-metered plant capacity cap	500kW	Monthly charges and fees for participants	As stipulated in the net-metering code (e.g. ECG: 20¢/kWh for net-metering; NEDCC: 2¢/kWh for net-metering)
		Number of meters per system	One per distributed PV system
		Storage at system phase allowed	Yes & one time-limited kWh

PROS

- Ghana explores energy diversity and security with 10% transfer to Government
- ECGNEDCC provides 100% reimbursement of residual cost
- ECGNEDCC provides net-metering code for grid-connected solar PV installation
- ECGNEDCC treats residual business as risk to be borne by utility-based energy companies, (to ECG and for distribution equipment and systems)

CONS

- ECGNEDCC will have all final administrative processes
- PV's increasing with 100%, ECGNEDCC could become a know-how leader or lose market share (as Ghana rolls out and money)

Distributed Generation Financing Models

	Cash Purchase	Lease-to-Own	PPA (currently not permitted in Ghana)	Rental
Upfront cost	High upfront cost	Zero or low upfront cost	Zero or low upfront cost	Zero or low upfront cost
Payment method	Progress payments until commissioning	Recurring payment for hardware lease	Payment per kWh generated	Fixed regular payment for equipment rental
Ownership	Client owns the PV system	Ownership transferred to client on completion of lease payments	Service provider owns PV system. Ownership may be transferred to client at agreed residual value	Service provider owns PV system. Ownership may be transferred to client at agreed residual value

Attractiveness of Rooftop solar PV for Customers

Stand-alone PV System

Net-metered / Grid-connected PV system

Caption:

Description:

Dimensions: 782 x 513

aperture: 0

credit:

camera:

caption:

created_timestamp: 0

copyright:

focal_length: 0

iso: 0

shutter_speed: 0

title:

orientation: 0

keywords: Array