

PROVISION OF SERVICES FOR A FEASIBILITY STUDY ON SOLAR ENERGY SYSTEM FOR A COCONUT PROCESSING FACTORY IN PAPUA NEW GUINEA

Tenderer's questions:

Questions:

1. Please provide more information on:

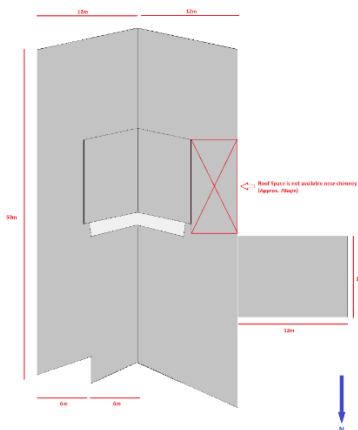
- Proposed site layout
- Historical electricity load profile and forecasts
- Existing site electrical line diagrams
- Existing generator spec (size in kVA, type, age, and heat rate if possible)
- Fuel storage facilities

Response:

- Roof space: Approx. 1250 sqm of roof space on main building + adjoining roof (See Diagram a)
- You tube video of roof: <https://www.youtube.com/watch?v=gZIZqVKSyzk>
- Proposed site layout – cover all available, strong, sunny roof area with Solar PV. (Diagram's a & b)
- Historical electricity load profile and forecasts – not available.
- Existing site electrical line diagrams – not available.
- Existing generator spec (size in kVA, type, age, and heat rate if possible) – see Diagram c. Generator could benefit from being about 40% larger to meet peak load – currently have to alternate the expelling and soap making machinery.
- Fuel storage facilities – 3000L diesel tank onsite.
- Electricity consumption is around 5067 kWh per month
- Generator fuel consumption per month is 615 litres

Diagrams:

a. Roof space



b. Aerial View of the Factory



c. Generator capacity

Power Generation

Plot No.B-2, SEZ Industrial area, Nandal, Dist-Satara, India 415523.

Generating Set ISO 8528	G2			
Model Number	C44D5			
Serial Number	D15I208851			
Manufacturing Order Number	GD04C-1506340			
Year of Manufacture	04-2015			
Generating Set Max Mass-Wet kg	1520			
Controller	PC1.1			
Declared Rating	ESP	PRP	COP	LTP
Rated Power (KVA)	44.0	40.0		
Rated Power (KW)	35.2	32.0		
Rated Current (A)	61.1	55.5		
Rated Voltage(V)	416	416		
Rated Frequency(Hz)	50	50		
Rated Power Factor	0.8	0.8		
Declared Rating: Enclosed Noise				
Sound Pressure Level @ 1m dB(A)	-	76.5		
Average @ 7m dB(A)	-	65.8		
Average @ 15m dB(A)	-	59.2		

LWA

97 dB

Lwa, 50 Hz @ 75% Prime as per 2000/14/EC Directive

CE

AS419823 CPNG-GBF-641