



Sustainable Development Group
 (Myanmar) Pte Ltd
 #03-A Myannigone Plaza
 Sanchaung Township
 Yangon, Myanmar
 Tel: 95 01 525994
 info@sdgmyanmar.com
 www.sdgmyanmar.com

For Building with Central Air-Conditioning System

Name of Building	
Address	
Contact Person	
Email	
Telephone No.	
Facsimile No.	

Building Information

Type of Building	Factory/ Hotel/ Office/ Mall/ Hospital/ Owned/ Leased yrs		
Building Age (yr)		Lettable Area (m ² /ft ²)	
No. of Storeys		Air Con Area (m ² /ft ²)	
No. of Basements		GFA (m ² /ft ²)	
Avg Occupancy (%)		Avg. no. of Occupants	

Energy Consumption

Avg Monthly Electrical Consumption	kWh	
Avg Monthly Electrical Bill	S\$	
Avg Maximum Demand	kW	
Contracted Capacity	kW	
Incoming power supply (voltage)	V	66kv / 22kv / 6.6kv / 400v / others
Other energy sources	-	Gas / Diesel / Others _____

Water Consumption

Avg Monthly Water Consumption	m ³	
Avg Monthly Water Bill	S\$	

Air-Conditioning System – Chillers (CH)

Make		Model		Tonnage		kw/ton		Qty	
Type of Chillers / Refrigerant		R11/ R12/ R134a/ R123/ Others							
Motor Brand		Model		Qty		Efficiency		kw	
Type of capacity control				VSD/ Guide vane/ others					
Chiller age (yr)									
Chilled water flow (usgpm/cmh) /pressure drop (ft/m/kpa)									
Condenser water flow (usgpm/cmh)/ pressure drop (ft/m/kpa)									
Chilled water set point/ operating set point (°C)									
No. of chiller in operation									
Average operating cooling load (ton)					Average operating power consumption(kw)				
Day		Night		Day		Night			
Balancing valve or flow control present?				Yes / No / Please specify:					
Any by-pass at chilled water pipe header?				Yes / No		Operation schedule			

For Building with Central Air-Conditioning System



Primary Chilled Water Pump (PCHWP)

Pump Brand		Model		Qty		Bhp	
Flow(usgpm/cmh) / Head(ft/m) / Efficiency(%)							
Type of Pump	Horizontal / Vertical Split / End suction / Others.....						
Motor Brand		Model		Qty		Efficiency	kw
VSD on motor	Yes / No		Brand	Danfoss / ABB/ Schneider / Others:			
Average operating power consumption (kw)							
No. of pumps in operations			Operation Schedule				
Balancing valve or flow control present?			Yes / No / Please specify:				

Secondary Chilled Water Pump (SCHWP)

Pump Brand		Model		Qty		Bhp	
Flow(usgpm/cmh) / Head(ft/m) / Efficiency(%)							
Type of Pump	Horizontal / Vertical Split / End suction / Others.....						
Motor Brand		Model		Qty		Efficiency	kw
VSD on motor	Yes / No		Brand	Danfoss / ABB/ Schneider / Others:			
Average operating power consumption (kW)							
No. of pumps in operations			Operation Schedule				
Balancing valve or flow control present?			Yes / No / Please specify:				

Condense Water Pumps (CWP)

Pump Brand		Model		Qty		Bhp	
Flow(usgpm/cmh) / Head(ft/m) / Efficiency(%)							
Type of Pump	Horizontal / Vertical Split / End suction / Others.....						
Motor Brand		Model		Qty		Efficiency	kw
VSD on motor	Yes / No		Brand	Danfoss / ABB/ Schneider / Others:			
Average operating power consumption (kw)							
No. of pumps in operation			Operation Schedule				
Balancing valve or flow control present?			Yes / No / Please specify				

Cooling Towers (CT)

Brand		Model		Qty		Tonnage	
Type of flow	Cross / counter flow / others:						
Motor Brand		Model		Qty		Efficiency	kw
VSD on towers	Yes / No		Brand	Danfoss/ ABB / Schneider / Others:			
Average operating power consumption (kw)							
No. of towers in operations			Operation Schedule				

For Building with Central Air-Conditioning System



Air Handling Units (AHU)

Brand		Model		Qty		Capacity	
Type of Motor Drive		Belt / Direct / others					
Type of Modulating Valves		On / Off / Modulating / 2-ways / 3 ways / Others:					
Type & Layers of Air Filters							
Motor Brand		Model		Qty		Efficiency	kw
Room temperature set point		°C	Room operating temperature			°C	%RH
VSD on AHUs	Yes / No		Brand	Danfoss / ABB/ Schneider / Others:			
Average operating power consumption (kw)							
No. of AHUs in operation					Operation Schedule		
Any clean room ? & class ?		Yes / No / 10 /100 / 1k / 100k / Others			Outside air AHU present?		Yes / No

Energy Management & Control System (EMCS)

Any EMCS installed? If yes, please specify name	Yes / No / Specify
EMCS in operation?	Yes / No / Specify
Type of Flow meters	Magnetic / Vortex / Pedal wheel / others,
Type of Temperature sensors	Pt100 / Pt500 / Pt1000 / 10k / 30k / Others.....
Power meters	Digital power meter / kw transducer / others.....
Any historical data logging? Interval?	Yes / No / seconds / minutes / hours interval
If manually operated, please explain.	

Lighting Information

Offices – floor area (m²)	
Type / quantity / power rating (kw)	
Operation schedule	
Corridor / lift lobby – floor area (m²)	
Type / Qty / Power rating (kw)	
Operation schedule	
Staircase – floor area (m²)	
Type / Qty / Power rating (kw)	
Operation schedule	
Toilet – floor area (m²)	
Type / Qty / Power rating (kw)	
Operation schedule	
Carpark – floor area (m²)	
Type / Qty / Power rating (kw)	
Operation schedule	
Others – floor area (m²)	
Type / Qty / Power rating (kw)	

For Building with Central Air-Conditioning System



Additional Information

Equipment List & Operating Schedule

If the given formats are not applicable, not enough, or as in additional information, please provide separate *specifications, equipment lists, daily log sheets and operating schedule* of the equipment such as

1. Toilet exhaust system, car park supply & exhaust system
2. Air heaters for RH control
3. Domestic water system & Water fall system
4. Cold room & energy recovery system
5. hot water & boiler system
6. Vertical lift & escalator, etc.

Historical Utility Information

Please provide utility bills for past 3 years covering electricity, gas, fuel, oil and water.

Building Characteristics

OTTV / ETTV / RTTV of the building	: / /		w/m ²
Window glazing	: Single / Double / Clear / others		
Shading devices	: Blinds / Curtains / Others	Heat gain from Windows	w/m ²
Façade color	: Grey / White / Yellow / others	% of window area to wall area	%
Roof coating / color	: Touch-on Membrane / White / Grey / Others		
Adjacent buildings	: One / Two / Three sides / Others :		
Height of nearby buildings	: Higher / Lower / About the same / Varies		

Please make available copies of the followings:

1. Architectural drawings and specifications, showing the plan & elevation of the building
2. Mechanical & Electrical drawings especially single line electrical drawing, chiller plant layout & chilled water & condenser water schematics drawings, its schedule of equipment and specifications.

The above is necessary for the audit team to familiarize themselves with the buildings's configuration, M&E systems and equipment layout, operation and control.

Historical Maintenance / Services

Any upgrading / replacement / overhaul of equipment / building carried out? Please state when & what has been done.

Historical Energy Conversation Measures

Any energy saving measure implementing or implemented? Please state when & what ECMs implemented, and investment figures, payback, problem encountered, objective, etc.

Any change in operating hours / set points / demand? If yes, please specify:
