



## QUESTIONNAIRE

### **ENERGY CONSUMPTION PREVIEW FOR COMMERCIAL BUILDINGS**

**(For The Purpose of Registration)**

#### **Instructions**

- i. Completing the attached questionnaire will help SEDA Malaysia (authorized government agency) to know about your premise. Therefore, we would appreciate it if you could complete the questionnaire and return it to us.*
- ii. The information provided in this questionnaire will be kept confidential and there will be no release of a part or whole of the information unless there is written consent from your company.*
- iii. **If you don't have at this stage readily available data to complete certain fields in this questionnaire, please provide estimated figures first or leave it blanks and the correct figures can be prepared at a later stage (during the walkthrough audit).***
- iv. For further inquiries please contact SEDA Malaysia (TECH). On Tel: +603 8870 5814 / +603 8870 5800 or Fax: 03-8870 5900, e-mail: [zulkhairree@seda.gov.my](mailto:zulkhairree@seda.gov.my) / [eacg@seda.gov.my](mailto:eacg@seda.gov.my)*

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#### **1. General Information**

- Name of the company:
- Address
- Telephone No.: Fax No.:
- Person in charge of energy issues  
Name: Position:  
Telephone No.: Fax No.:
- Description of the business activity:  
(For hotels indicate No. of stars, for Hospital indicate if it is public or private hospital)

## 2. Size of Business

- Number of staff:
- No. of main buildings:
- Estimated total Net / Occupied Floor Areas (NFA): \_\_\_\_\_m<sup>2</sup>
- Estimated total Gross Floor Areas (GFA): \_\_\_\_\_m<sup>2</sup>
- For hotels only
  - No. of guess rooms:
- For hospitals only
  - No. of patient beds:
- For office / tenanted buildings
  - No. of tenants who have individual utility kWh meters:

## 3. Operating Time

- General starting time:
- General finish time:
- No of working days per week and per year:
- Do you work on public holidays? **Yes/No**

## 4. Building Description

Building No.	Usage	No. of Floors	Building materials & color's (Walls & Roof)	Are windows tinted?	Total occupied areas (m <sup>2</sup> )	Is the roof insulated? (Yes/No)
1						
2						
3						
4						

Add additional sheet for extra buildings

### 5. Electricity

- Tariff code:
- Electricity End-Users

List in the following the estimated percentages of end-user consumption of the total electricity bill:

<b>End-User Load</b>	<b>Percentage of Total Bill %</b>
<b>Boilers</b>	%
<b>Air-conditioning</b>	%
<b>Lighting</b>	%
<b>Others (please specify)</b>	%
<b>Total</b>	100 %

- Estimated energy savings (%) based on ESCO observations/simple measurements:
- List your electricity bill history for the last 12 months:

<b>Month</b>	<b>Year</b>	<b>KWh (Peak)</b>	<b>KWh (off-peak)</b>	<b>MD (kW)</b>	<b>PF penalty (RM)</b>	<b>Total Bill (RM)</b>


- Do you pay a Power Factor penalty? **Yes/No**
  
- Please attach **a copy of the latest annual TNB electricity bill** of your company.

• **Electricity Metering**

Main utility meters (kWh & kVARh):

<b>Meters</b>	<b>Function</b>	<b>Type (Electronic/Electro- mechanical with rotation disk)</b>

Sub-meters (kWh & kVARh):

<b>Meters</b>	<b>Function</b>	<b>Type (Electronic/Electro- mechanical with rotation disk)</b>

## 6. Fuels

- Do you use any type of fuel? **Yes/No**

If **Yes**, please fill the following table:

Fuels	Usage	Unit	Estimated annual costs (RM)

## 7. Boilers (if any)

This is related to boilers used for generating steam used in the operations.

If you have boilers, please complete the following information:

Boilers	1	2	3	4
Fuel type				
Boiler Type Water-tube/Fire-tube				
Steam Capacity (Ton/hr)				
Steam values (Ton/hr, °C, bar)				
Efficiency or Heat Rate (%)				
Frequency of blow down				
Does it have heat recovery? Yes/No				
Age and Year of Commissioning (Years/ 19...)				
Manufacturer				
Use				

- Do you have any heat recovery/rejection? **Yes/No**

If **Yes**, describe briefly how:

**8. Air-conditioning System**

- Start-up time:
- Shut down time:
- Is there any control to the amount of fresh air used by the air-conditioning system?  
**Yes/No**

If **Yes**, describe briefly how:

- Indicate the type of air-conditioning system used in your buildings:

Location	Type & Capacity	Control (Manual/Automatic)	No.

- Is there any future upgrading for your air-conditioning system? **Yes/No**

If **Yes**, please indicate when and what type of the new system (capacity, type).

## 9. Lighting

- List the types of lighting technologies used in your buildings:

<b>Lighting Technologies</b>	<b>Place of Use</b>	<b>Total No.</b>	<b>Total kW</b>	<b>Remarks</b>
Ordinary fluorescent tubes				
Compact fluorescent lamps				
Incandescent globes				
Luminaires without reflector				
Luminaires with mirror reflectors				
Tri-phosphor fluorescent tubes				
Lighting energy savings systems (provide the brand name)				
Lighting control system				
Others (please specify)				

- Is there any future upgrading for your lighting system? **Yes/No**

If **Yes**, indicate when and what type of the new system.

### 10. Water Consumption

- Do you recycle your water? **Yes/No**

If the answer **Yes**, indicate what is the proportion of used water is recycled: \_\_\_\_\_ %

- List your monthly water consumption for the last 12 months:

Month	Year	Consumption (m <sup>3</sup> )	Costs (RM)

### 11. Energy Loads

- If available, please attach a copy of the daily/weekly/monthly load cycle.

### 12. Are there any future expansion plans for hot water and power demand? **Yes/No**

- If **Yes**, please describe the plans briefly.



**13. Do you have any plans for an Energy Efficiency project? Yes/No**

- If **Yes**, please describe the projects:

**14. Have you recently implemented any Energy Efficiency Projects? Yes/No**

- If **Yes**, please describe the projects:

**15. Is there any energy saving equipment installed in your buildings? Yes/No**

- If **Yes**, please describe briefly about the equipment.

**16. Do you have Supervisory Control and Data Acquisition (SCADA) or Building Automation System (BAS) for monitoring and controlling your operations? Yes/No**

- If **Yes**, does your SCADA/BAS record electricity demand of your manufacturing facilities?

**17. Is there any future upgrading of any facilities for your buildings? Yes/No**

- If **Yes**, indicate when and provide the description of the upgrade.