Application Procedure for Sri Lanka National Energy Efficiency Award 2012

Sri Lanka National Energy Efficiency Awards competition is the annual event conducted by the Sri Lanka Sustainable Energy Authority for public and private sector institutions with the aim of recognizing their contribution towards an Energy Secure Sri Lanka.

There are 5 sectors eligible for the award as listed below and 3 levels in each sector as large, medium and small depending on the scale of establishments.

1. Manufacturing
2. Services
    i. Hotels
    ii. Commercial Buildings
    iii. State Sector Buildings
3. Healthcare

Any entity located in Sri Lanka for a minimum period of three (03) years prior to the application date may apply for the award. Eligibility for the award is intended to be as open as possible to all entities. Eligibility restrictions and conditions ensure fairness and consistency in definition. State sector or state owned entities, publicly or privately owned, domestic or foreign-owned, joint ventures, incorporated firms, sole proprietorships, partnerships, and holding companies may apply.

Application Procedure

- **New Applicants**

As the initial step, applicants need to submit a completed Energy Efficiency Check List (*see Chapter 5)** and Application Form (*see Chapter 6)** for eligibility establishment no later than the 01st December 2011 (*see Chapter 1)**, to SLSEA.

All registered applicants shall be notified in writing of their eligibility (or otherwise with reasons for non-eligibility) by SLSEA no later than 15th December 2011.

Eligible applicants need to submit the Energy Efficiency Questionnaire (see Chapter 7)* twice; initially for the baseline setting before 30th December 2011 and thereafter for the final review before 15th April 2012. All relevant evidence documents are required to submit along with baseline and review EE questionnaires. A period of six months is allowed between the baseline and review stage enabling the applicants to be prepared with a comprehensive energy efficiency programme in their facilities. Information provided at the baseline stage shall be treated as the reference for evaluations.

- **Repeat Applicants**

Repeat applicants are the ones continue to apply for the award once their eligibility is established in their first year of application. The repeat applicants who wish to participate SLNEEA 2012 shall submit completed Application Form (*see Chapter 6)* no later than 06th January 2012 and a review data of* Energy Efficiency Questionnaire (see Chapter 7)* before 15th April 2012.

*Sri Lanka National Energy Efficiency Award – Guide Book

Chapter 5

ENERGY EFFICIENCY SELF-ANALYSIS CHECK LIST

Sri Lanka National Energy Efficiency Award (SLNEEA)

Award for Excellence in Energy Conservation and Management

Instructions for the applicant

- *Please tick (√) the appropriate cage* □
- *Please see the abbreviations at the end of this checklist*

The check list below shall enable you to make a self assessment about the present status of energy efficiency in your facility and would guide you to achieve higher efficiencies.

5.1 Electrical energy

	Possibility for energy saving	Yes	No	N/A
1	Are you sure that you have obtained the best possible electricity tariff from CEB?			
2	Do you have a proper house keeping programme (minimizing idle time, etc.) with respect to the electricity consuming machines and equipment?			
3	Do you have a proper maintenance programme with respect to the electricity consuming machines and equipment?			
4	Do you have a programme to replace inefficient electricity consuming machines and equipment?			
5	Do you have an idea about the efficiencies of electricity consuming machines & equipment (motors, etc.)?			
6	Do you use high efficiency motors (HEM)?			

7	Have you matched electrical motor capacities to loads (correct sizing of motors)?			
8	Do you use variable speed drives (VSD) for variable loads?			
9	Do you use soft-starters in your electrical motors?			
	Electrical Power Demand Management			
10	Do you know your Plant Load Factor LF (ratio between energy delivered - kWh and the maximum demand - kVA)?			
11	Do you have a control over the operation of non-critical electrical loads that are not directly contributing to the production?			
12	Do you start-up your electrical loads simultaneously at the beginning of the day or after a power failure?			
13	Have you introduced soft starters for large electrical motors?			
14	Have you carried out a load test of your standby generator to understand the fuel consumption and the kWh generating cost?			
15	Is there a possibility to control your maximum electrical power demand by using your standby generator (Peak Clipping)?			
	Power Factor Correction			
16	Do you know your Plant Power Factor?			
17	Have you corrected your Plant Power Factor?			
	If yes;			
18	Is it individual correction of motors?			
19	Is it centrally corrected?			
20	Is it a combination of individual correction of motors and central correction?			
21	Do you maintain your Power Factor Correction system?			

5.2 Lighting

	Possibility for energy saving	Yes	No	N/A
1	Do you still use incandescent bulbs?			
2	Do you still use T12 linear fluorescent lamps?			
3	Do you use T8 linear fluorescent lamps?			
4	Do you use T5 linear fluorescent lamps?			

5	Do you use compact fluorescent lamps (CFL)?			
6	Do you still use Electromagnetic Ballasts for linear fluorescent lamps?			
7	Do you use Electronic Ballasts for linear fluorescent lamps?			
8	Do you use Metal Halide lamps (MH)?			
9	Do you use High Pressure Sodium lamps (HPS)?			
10	Do you use Low Pressure Sodium lamps (LPS)?			
11	Do you use LED lamps?			
12	Do you match the light level to visual requirements?			
13	Does your switching arrangement & switch locations allow the individual control (on/off) of lamps?			
14	Do you have a proper maintenance and house keeping arrangement (regular fixture cleaning, etc.) for the lighting system?			
15	Do you use natural lighting?			
16	Do you use time, occupancy, daylight based control mechanisms?			
17	Do you use task lighting?			
18	Do you use efficient lighting fixtures / Luminaires?			
19	Do you de-lamp after retrofitting of reflectors?			
20	Are bulbs left on even when lighting is no longer essential?			

	Shaded rows indicate inefficient practices

5.3 Air Conditioning

	Possibility for energy saving	Yes	No	N/A
1	Did you consider the requirements for air conditioning at the time of building design?			
2	Do you have a control of Solar radiation (direct and indirect) into your air conditioned space?			
3	Have you either eliminated or reduced the glazed window areas on the west exposure?			
4	Did you consider the requirements for air conditioning at the time of deciding your building orientation?			
5	Do you have either thicker or insulated walls on the west exposure?			

6	Do you have double glazed windows?			
7	Do you have shading devices for glazed areas?			
8	Do you have insulated roofs?			
9	Do you have lighter colours for roof and walls?			
10	Have you ventilated the attic spaces of your building?			
11	Have you avoided the possibility of thermal bridging?			
12	Do you have proper sealing arrangements to minimize air infiltration?			
13	Have you controlled inflow of outside air into your air conditioned space?			
14	Have you minimized the leakage of conditioned air to the external environment?			
15	Do you have air-locking arrangements at main entrances?			
16	Have you controlled the internal heat gains due to office equipment such as computers, Photo copiers, Fax machines, Refrigerators, Cooking & heating equipment, Motors, etc. in your air conditioned space?			
17	Do you know the Coefficient of Performance (COP) or the Energy Efficiency Ratio (EER) of your air conditioners?			
18	Is the COP of your air conditioners below 2.7?			
19	Is the EER of your air conditioners below 9.2?			
20	Do you have Central Air Conditioning systems that are more energy efficient than small individual systems?			
21	Do you have Water Cooled Air Conditioning systems that are more energy efficient than air cooled systems?			
22	If you have a water cooled system, do you control the pH of water?			
23	If you have a water cooled system, do you control the hardness of water?			
24	Do you use individual air conditioning units for air conditioning needs with shorter & different period of operating time?			
25	Do you use central air conditioning units for air conditioning needs with uniform loading & same operating hours?			
26	Is there a possibility to reduce the condenser temperature of air conditioning units?			
27	Is there a possibility to increase the temperature of the air conditioned space without compromising the human comfort?			

28	Are your air conditioners equipped with Energy Efficient Inverter Technology?			

	Shaded rows indicate inefficient practices

5.4 Pumps

	Possibility for energy saving	Yes	No	N/A
1	Do you know the efficiency of your pumps?			
2	Do your pump motors are efficient?			
3	Is it possible to operate your pumps during off-peak times?			
4	Do you use holding tanks to equalize flow over production cycle?			
5	Do you have bypass loops in your pumping system?			
6	Do you have unnecessary flows in your pumping system?			
7	Do you have large enough pipes in your pumping system to minimize flow losses?			
8	Did you match your pumps to loads?			
9	Do you have highly variable loads?			
10	Do you use parallel pumps for highly variable loads?			
11	Do you have throttle valves?			
12	Do you have speed controlling mechanisms for variable loads?			
13	Do you have belt drives to couple pumps to motors?			
14	Do you have direct couplings (pumps to motors)?			
15	Do you carry out proper maintenance?			

	Shaded rows indicate inefficient practices

5.5 Compressors

	Possibility for energy saving	Yes	No	N/A
1	Do you operate your compressors at the lowest possible pressure?			
2	Do you operate your compressors at their full loads?			
3	Do you have varying pressure (high & low) needs of your operation?			

4	Do you use variable speed drives?			
5	Do you use separate high pressure compressors for high pressure needs?			
6	Do you use separate low pressure compressors for low pressure needs?			
7	Do you use separate small capacity compressors for small capacity needs?			
8	Have you prevented compressed air leaks?			
9	Is your compressor intake air temperature high?			
10	Is your compressor intake air moist?			
11	Do you use compressed air for cooling purposes?			
12	Do you use compressed air operated hand tools?			
13	Do you carry out proper maintenance?			
14	Is your compressed air system very large?			
15	If your compressed air system is very large, do you have arrangements / facility for waste heat recovery?			

	Shaded rows indicate inefficient practices

5.6 Fans & Blowers

	Possibility for energy saving	Yes	No	N/A
1	Do you have large enough ducts to minimize flow losses?			
2	Do you have throttle valves & dampers?			
3	Do you have variable speed drives?			
4	Do you have belt drives to couple fans / blowers to motors?			
5	Do you have direct couplings (fans / blowers to motors)?			
6	Do you carry out proper maintenance?			

	Shaded rows indicate inefficient practices

5.7 Thermal energy

	Possibility for energy saving	Yes	No	N/A
1	Is there a possibility switch over to a cheaper fuel?			
2	Is the insulation of high temperature equipment adequate?			
3	Have you taken all measures to minimize waste of thermal energy?			
4	Have you taken all measures to recover waste heat?			

5.8 Boilers

	Possibility for energy saving	Yes	No	N/A
1	Do you use the cheapest fuel that can be burnt in your boiler?			
2	If you use liquid fuel, do you maintain the right temperature of fuel?			
3	If you use liquid fuel, do you maintain the right pressure of fuel?			
4	If you use solid fuel, do you reduce the moisture content to the minimum possible level?			
5	If you use solid fuel, do you reduce the size of fuel pieces to the minimum possible level?			
6	Do you tune the burner?			
7	Do you maintain the correct air-to-fuel ratio in burning?			
8	Do you maintain the correct draft at the stack?			
9	Do you operate your boiler at the rated capacity?			
10	Do you operate your boiler at the rated pressure?			
11	Do you maintain the correct fuel feeding rate?			
12	Do you maintain the correct blow down rate?			
13	Does the insulation of the boiler and steam distribution system adequate?			
14	Do the steam traps of the steam distribution system work properly?			
15	Have you prevented the air leaks of the boiler?			
16	Do you have a condensate recovery system?			
17	Do you have arrangements / facilities to recover waste heat?			
18	Do you carry out proper boiler water treatment?			
19	Do you carry out only external water treatment (using softeners)?			

20	Do you carry out only internal water treatment (using chemicals)?			
21	Do you carry out both external & internal water treatment?			

	Shaded rows indicate inefficient practices

5.9 Dryers

	Possibility for energy saving	Yes	No	N/A
	Material in			
1	Do you have thermal drying?			
	If yes;			
2	Do you have possibilities to dry your product by mechanical means instead of thermal drying?			
3	Is there a possibility to adopt other forms of drying instead of thermal drying?			
4	Is it the minimum particle size possible of your products to be dried?			
	Material out			
5	Can you ensure that your product is not over-dried?			
6	Can you ensure that your product is not under-dried?			
	Air in			
7	Can you ensure that you have the right quantity of air intake to the dryer?			
8	Can you ensure that you have the right temperature of air intake to the dryer?			
9	Is there a possibility to pre-heat intake air?			
10	Can you ensure that you have the right humidity of air intake to the dryer?			
11	Can you ensure that you have a uniform flow of air intake to the dryer?			
12	Can you ensure that you have the right quantity of air intake to the dryer?			
	Air out			
13	Do you have arrangements / facilities to recover waste heat?			
14	Can you ensure that you have the lowest temperature possible of			

	exhaust air?			
15	Can you ensure that you have the highest humidity possible of exhaust air?			
16	Is there a possibility for exhaust air re-circulation?			
17	Is there a possibility for the heat recovery of exhaust air?			
	Heat in			
18	If burning of fuel is taking place as the heat source of your dryer, do you have the highest possible combustion efficiency?			
19	If the steam is used as the source of heat, do you have a proper steam and condensate management system?			
20	If the hot air is used as the heating medium, do you have the right temperature of hot air?			
	Insulation			
21	Do you have the right type of insulation?			
22	Do you have the right thickness of insulation?			
23	Do you have right protection for insulation?			
	Air leaks			
24	Have you prevented the loss of hot air through leaks?			
25	Have you prevented fresh air entering the dryer through leaks?			
	Other possibilities			
26	Do you know the efficiency of your dryer?			
27	Is there a possibility to replace your dryer with a high efficiency dryer?			
28	If you use fuel as the source of energy and hot air as the heating medium through heat exchanging process, is there a possibility of direct firing of fuel and use the exhaust as the heating medium?			
29	Is there a possibility of using solar energy for air pre-heating?			

	Shaded rows indicate inefficient practices

5.10 Declaration

I declare that the information provided herein are true and correct to the best of my knowledge and understanding.

…… ……..
Date Signature of Highest-Ranking Official

☐ Mr ☐ Mrs ☐ Ms ☐ Dr
Name: ……
Title: ……
Address: ……
……
……
Telephone Number: ……
Fax Number: ……
E-mail: ……

***Submission**: Completed Energy Efficiency Check List must be post marked or hand delivered along with the Application Form no later than the specified date in the calendar in Chapter 4, to* SLSEA. *This check list may be copied and attached to, or bound with, other application materials.*

Abbreviations

CEB	-	*Ceylon Electricity Board*
CFL	-	*Compact Fluorescent Lamp*
HEM	-	*High Efficiency Motor*
kWh	-	*Kilo Watt Hour*
LF	-	*Load Factor*
N/A	-	*Not applicable*
VSD	-	*Variable Speed Drive*

Chapter 6

APPLICATION FORM

Sri Lanka National Energy Efficiency Award (SLNEEA)

Award for Excellence in Energy Conservation and Management

(See Chapter 8 for detailed instructions)
This form may be copied and attached to, or bound with, other application materials

---

Instructions for the applicant

- *Please fill in the blanks where applicable*
- *Please attach the relevant support documents*
- *Please strike-off inappropriate word/s where applicable*
- *Please tick (√) the appropriate cage or cages where applicable* □

6.1 Applicant

Official Name:
(in English) ……
(in Sinhala) ……
(in Tamil) ……

Head Office Address: ……
……
……

Factory Address: ……
……
……

6.2 Highest-Ranking Official

Name: ……

☐ Mr ☐ Mrs ☐ Ms ☐ Dr

Title: ……

Address: .....
.....
.....
Telephone Number: .....
Fax Number: .....
E-mail: .....

6.3 Contact Point

Name: .....
☐ Mr ☐ Mrs ☐ Ms ☐ Dr
Title: .....
Address: .....
.....
.....
Telephone Number: .....
Fax Number: .....
E-mail: .....

6.4 Alternate Contact Point

Name: .....
☐ Mr ☐ Mrs ☐ Ms ☐ Dr
Title: .....
Address: .....
.....
.....
Telephone Number: .....
Fax Number: .....
E-mail: .....

6.5 Applicant Status (Check one)

Has the applicant officially or legally existed for at least three years prior to the Award Application date?

☐ Yes ☐ No

6.6 Award Category (Check only one category as appropriate)

SECTOR		LARGE	MEDIUM	SMALL
Manufacturing				
Services	Hotels			
	Commercial buildings			
	State sector office buildings			
Health care				

6.7 Industrial Classification

List up to three of the most descriptive three-or four-digit ICS codes. (See page 58 for ICS codes)

a. …… b. ……..…… c. ……

6.8 Size and Location of Applicant

a. Total number of employees: ……..

b. For the preceding fiscal year:

- Check one financial descriptor: ☐ Sales ☐ Revenue ☐ Budget
- Check amount: ☐ Up to LKR 100,000
  ☐ From LKR 100,000 to LKR 1 M
  ☐ From LKR 1 M to LKR 10 M
  ☐ From LKR 10 M to LKR 100 M
  ☐ Over LKR 100 M

c. In the event the applicant receives an award, can the applicant make available sufficient personnel and documentation to share its practices at the Quest for Excellence in Energy Efficiency Conference?

☐ Yes ☐ No

d. Attach a line and box organization chart for the applicant. In each box, include the name of each subsidiaries and its head.

6.9 Subsidiaries

(*If the applicant is a subsidiary, please proceed to question)*

a. Is the applicant _____ a larger parent or system? *(Check all that apply)*

☐ a subsidiary of ☐ a unit of ☐ owned by
☐ a division of ☐ a like organization of
☐ controlled by ☐ administered by

b. Parent organization:
Name: ……..…….
Address: ……..……..
……..……..
……..……..
Name of the highest-ranking official: ……
Title: ……
Number of employees of the parent: …….

c. Briefly describe the major functions provided to the applicant by the parent or by other subsidiaries of the parent. Examples of such functions include but are not limited to strategic planning, business acquisition, research and development, data gathering and analysis, human resources, legal services, finance or accounting, sale/marketing, supply chain management, global expansion, information and knowledge management, education/training programs, information systems and technology services, curriculum and instruction, and academic program coordination/development.

……...
……...
……...

d. Is the applicant self-sufficient enough to respond to all SLNEEA criteria?

☐ Yes ☐ No (Briefly explain)

……...
……...
……...

e. Provide the name and date of the official document (e.g., annual report, organization literature, press release, etc.) supporting the subunit designation. Attach relevant portions of the document showing clear definition of the applicant as a discrete entity.

Name: …… Date: ……

f. Briefly describe the organizational structure and relationship to the parent.

Attach line and box organization chart(s) showing the relationship of the applicant to the highest management level of the parent, including all intervening levels. In each box, include the name of the subsidiaries and its head.

g. Is the applicant's product or service unique within the parent organization? (Check one)

☐ Yes ☐ No

If "No", do other subsidiaries within the parent provide the same products or services to a different customer base? (Check one)

☐ Yes ☐ No

If neither of the boxes in "g" is checked "Yes", complete 1,2 and 3 below.

1 Provide a brief description of how the market and product(s) or service(s) are similar.

……...
……...
……...

2 Indicate the organizational relationships of all subsidiaries that provide similar or identical products or services, including the approximate sales, revenues, or budgets for each.

……...
……...
……...

3 Describe how the applicant is different from its parent and other subsidiaries of the organization (e.g., market, location, name)

……...
……...
……...

h. Was the applicant independent prior to being acquired, and does it continue to operate independently under its own identity?

☐ Yes ☐ No

Note: If eligibility is based on the subsidiary being independent prior to being acquired and continuing to operate independently under its own identity, provide a copy of an official document to support this response.

6.10 Commitment, Self-Certification Statement & Signature of the Highest-Ranking Official

We understand that this application will be reviewed by the members of the Board of Examiners.

Should our organization be selected for a site visit, we agree to facilitate an open and unbiased examination.

If our organization is selected to receive an award, we agree to share non-proprietary information on our successful energy efficiency performance with other Sri Lankan organizations.

I state and attest that;

1 I have reviewed the information provided by my organization in this application.

2 To the best of my knowledge, no untrue statement of a material fact is contained in this application, and no omission of a material fact has been made in this application.

3 Based on the information herein and the current eligibility requirements for the SLNEEA, my organization is eligible to apply.

4 I understand that at any time during the award process cycle, if the information is found not to support eligibility, my organization will no longer receive consideration for the award and will receive only a feedback report.

5 In the event my organization wins the Award/Merit Certificate, I will tag the year of the Award / year of the Merit Certificate whenever I brand the winning the award in activity of any nature in relation to my company.

…… ……..
Date Signature of Highest-Ranking Official

Name: …….
☐ Mr ☐ Mrs ☐ Ms ☐ Dr
Title: …….
Address: …….
…….
…….
Telephone Number: ……..
Fax Number: ……..
E-mail: ……..

***Submission**: Completed Application Form must be post marked or hand delivered no later than the specified date in the calendar in Chapter 4, to* SLSEA. *This form may be copied and attached to, or bound with, other application materials.*

Chapter 7

ENERGY EFFICIENCY QUESTIONNAIRE

Sri Lanka National Energy Efficiency Award (SLNEEA)

Award for Excellence in Energy Conservation and Management

(See Chapter 9 for detailed instructions)

This questionnaire may be copied and attached to, or bound with, other application materials

---

Instructions for the respondent

- *Please fill in the blanks where applicable*
- *Please provide the support documents where applicable*
- *Please strike-off inappropriate word/s where applicable*
- *Please tick (√) the appropriate cage or cages where applicable* □
- *Please see the abbreviations at the end of this questionnaire*

7.1 Energy Utilization Equipment

Indicate the energy utilization equipment in your facility.

Electrical		Thermal	
Lights		Steam Boilers	
Air conditioners		Hot water Boilers	
Fans, blowers & other ventilation equipment		Thermal Fluid heaters	
Office equipment such as computers, photo copiers, etc.		Dryers	
Fridges, freezers, etc.		Furnaces	
Kitchen equipment		Kilns	

Laundry equipment		Generators	
Lifts, escalators, etc.		Others (Please specify)	
Pumps		……	
Compressors		……	
Chillers		……	
Heaters		……	
Motors		……	
Others (Please specify)		……	
……		……	
……		……	
……		……	
……		……	

7.2 Source of Energy

Indicate the sources of energy used in your facility (excluding transport)

1 Electricity ☐

2 Fossil Fuel ☐

- Diesel ☐
- Furnace Oil ☐
- Kerosene ☐
- LPG ☐
- Coal ☐
- Other ☐ ……

3 Biomass ☐

- Firewood ☐
- Saw dust ☐
- Paddy husk ☐

			Bagasse	☐
			Coconut shell	☐
			Other	☐ …….
4	Hydro	☐		
5	Solar	☐		
6	Wind	☐		
7	Other	☐	…….	

7.3 Management Commitment to Energy Efficiency *(Score – 100)*

Provide the answers to the below questions by checking the appropriate cage

Question		Baseline Stage Date: 30.09.2011			Review Stage Date: 31.03.2012		
		Yes	No	N/A	Yes	No	N/A
1	Do you have an Energy Efficiency Policy?						
2	Does your organization have an Energy Conservation Cell?						
3	Have you appointed an Energy Manager?						
4	Do you carry out Energy Audits in your facility?						

If '**Yes**' is the answer to Question 1, attach the copy of energy policy.

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 2

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 3

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....
.....	.....

Describe If '**Yes**' is the answer to Question 4

Baseline Stage				**Review Stage**			
Date of Audit	Recommendations given	Implementation		Date of Audit	Recommendations given	Implementation	
		Yes	**No**			**Yes**	**No**
……	……	……	……	……	……	……	……
……	……	……	……	……	……	……	……
……	……	……	……	……	……	……	……
……	……	……	……	……	……	……	……
……	……	……	……	……	……	……	……
……	……	……	……	……	……	……	…….
……	……	…….	…….	…….	……	…….	.

7.4 Employee Awareness & Training on Energy Efficiency *(Score – 100)*

Provide the answers to the below questions by checking the appropriate cage.

Question		**Baseline Stage** Date: 30.09.2011			**Review Stage** Date: 31.03.2012		
		Yes	**No**	**N/A**	**Yes**	**No**	**N/A**
1	Have you assigned sufficient manpower to energy efficiency related activities?						
2	If yes, have you trained such manpower in energy conservation & management?						
3	Have you created awareness among the employees on the importance of energy efficiency?						

Describe if '**Yes**' is the answer to Question 1

Baseline Stage	**Review Stage**
.....	.....
.....	.....
.....	.....
.....	.....

If '**Yes**' is the answer to Question 2, Describe and attach the copies of training certificates.

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....
.....	.....

If '**Yes**' is the answer to Question 3, Describe the methods used and frequency of the programs.

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....
.....	.....

7.5 Financial Commitment to Energy Efficiency *(Score – 100)*

Provide the answers to the below questions by checking the appropriate cage

Question		Baseline Stage Date: 30.09.2011			Review Stage Date: 31.03.2012		
		Yes	**No**	**N/A**	**Yes**	**No**	**N/A**
1	Have you invested on energy efficiency projects?						
2	Have you invested on renewable energy projects?						

Describe if '**Yes**' is the answer to Question 1

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 2

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

7.6 Planning, Monitoring, Evaluation & Reporting *(Score – 200)*

Provide the answers to the below questions by checking the appropriate cage

Question		Baseline Stage Date: 30.09.2011			Review Stage Date: 31.03.2012		
		Yes	No	N/A	Yes	No	N/A
1	Do you set energy efficiency targets?						
2	Do you monitor energy efficiency trends using historical data?						
3	Do you compare your energy performance with that of similar entities?						
4	Do you integrate energy performance with other performances such as environment, quality, safety, etc.?						

Describe if '**Yes**' is the answer to Question 1

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 2

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 3

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 4

Baseline Stage	**Review Stage**
.....	.....
.....	.....
.....	.....

7.7 Energy Performance *(Score – 400)*

7.7.1 Monthly Average Energy Consumption

Indicate the monthly average energy consumption (during the past twelve months) in your facility (excluding transport) at the date of baseline stage or at the date of review stage as appropriate. Attach a copy of an electricity bill within last twelve months period.

Source of Energy		Type	Units	Baseline Stage Date: **30.09.2011**	Review Stage Date: **31.03.2012**
				Consumption	Consumption
1	Electricity		kWh / month	……..	……..
2	Solid Fuel	……..	kg / month	……..	……..
		……..	kg / month	……..	……..
		……..	kg / month	……..	……..
3	Liquid Fuel	……..	Liters / month	……..	……..
		……..	Liters / month	……..	……..
		……..	Liters / month	……..	……..
4	Gaseous Fuel	……..	kg / month	……..	……..
		……..	kg / month	……..	……..
		……..	kg / month	……..	……..

7.7.2 Monthly Average Output (Production or Services)

Indicate the monthly average output (during the past twelve months) in your facility at the date of baseline stage or at the date of review stage as appropriate.

Type of Output		Description	Units	Baseline Stage Date: **30.09.2011**	Review Stage Date: **31.03.2012**
				Output Quantity	Output Quantity
1	Manufacturing	……..….	……..	……..	……..
		……..….	……..	……..	……..

		……	……	……	……
2	Services (Buildings)	……	m^2 Floor Area	……	……
		……	……	……	……
		……	……	……	……
	Services (Hotels)	……	m^2 of Gross Floor Area including the area of swimming pool	……	……
		……	Occupied Rooms	……	……
		……	……	……	……
3	Healthcare	……	Patient days	……	……
		……	……	……	……
		……	……	……	……

7.7.3 Specific Energy Consumption - Electrical (SEC)

By using the average monthly output and average monthly energy consumption stated above, calculate and then indicate below the specific energy consumption - electrical in your facility at the date of baseline stage or at the date of review stage as appropriate.

Type of Output		Units	Baseline Stage Date: **30.09.2011**	Review Stage Date: **31.03.2012**
			SEC	SEC
1	Manufacturing	kWh per …….	……...	……...
		kWh per …….	……...	……...
		kWh per …….	……...	……...
2	Services	kWh per …….	……...	……...
		kWh per …….	……...	……...
		kWh per …….	……...	……...
3	Healthcare	kWh per patient day	……...	……...
		kWh per …….	……...	……...
		kWh per …….	……...	……...

Some examples of "Units" of specific energy consumption - electrical;

Manufacturing

Tea industry	-	kWh per kg of Made Tea
DC industry	-	kWh per kg of Desiccated Coconut
Tile industry	-	kWh per 1,000 Tiles
Garment industry	-	kWh per 5,000 m of Thread Cones used
	-	kWh per earned h
Ceramics industry	-	kWh per MT of Raw Materials
	-	kWh per MT of Products
	-	kWh per Piece
	-	kWh per m^2 (for Ceramic Tiles)

Rubber industry	-	kWh per MT of Rubber

Services

Buildings	-	kWh per m^2 floor area (FA)
	-	kWh per 1,000 m^2 per Daily Operating Hour (Known as Building Power)
Hotels	-	kWh per m^2 of Gross Floor Area (GFA) including the area of swimming pool
	-	kWh per Occupied Room (OR)

Healthcare

Hospitals	-	kWh per Patient Day

7.7.4 Specific Energy Consumption - Thermal (SEC)

By using the average monthly output and average monthly energy consumption stated above, calculate and then indicate below the specific energy consumption - thermal in your facility at the date of baseline stage or at the date of review stage as appropriate.

Type of Output		Units	Baseline Stage Date: **30.09.2011**	Review Stage Date: **31.03.2012**
			SEC	SEC
1	Manufacturing	…….. per …….	……...	……...
		…….. per …….	……...	……...
		…….. per …….	……...	……...
2	Services	…….. per …….	……...	……...
		…….. per …….	……...	……...
		…….. per …….	……...	……...
3	Healthcare	…….. per patient day	……...	……...
		…….. per …….	……...	……...
		…….. per …….	……...	……...

Some examples of "Units" of specific energy consumption - thermal;

Manufacturing

Tea industry	-	kg of Firewood per kg of Made Tea
	-	Liters of Furnace Oil per kg of Made Tea
	-	Liters of Diesel per kg of Made Tea
DC industry	-	kg of Firewood per kg of Desiccated Coconut
	-	Liters of Furnace Oil per kg of Desiccated Coconut
Tile industry	-	kg of Firewood per 1,000 Tiles
Garment industry	-	Liters of Diesel per 5,000 m of Thread Cones used
Ceramics industry	-	Liters of Furnace Oil per MT of Raw Materials
	-	kg of LPG per MT of Products
	-	Liters of Furnace Oil per Piece
	-	kg of LPG per m^2 (for Ceramic Tiles)

Rubber industry - kg of Firewood per MT of Rubber

- Liters of Furnace Oil per MT of Rubber

Services

Buildings - Liters of Diesel per m^2

- Liters of Diesel per 1,000 m^2 per Daily Operating Hour (Known as Building Power)

Hotels - Liters of Furnace Oil per m^2 of Gross Floor Area (GFA) including the area of swimming pool

- Liters of Furnace Oil per Occupied Room (OR)

Healthcare

Hospitals - Liters of Furnace Oil per Patient Day

7.7.5 Energy Efficient Improvement Projects

Provide the information of electrical energy efficiency projects implemented.

Project Description		Duration		Cost Benefit	Units	Baseline Stage Date: 30.09.2011	Review Stage Date: 31.03.2012
		Start date	End date				
1	…… …… ……	…… …… …	…… …… …..	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
2	…… …… ……	…… ……	…… …… …..	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
3	…… …… ……	…… …… .	…… …… .	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
4	…… …… ……	…… …… …..	…… …… …..	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
	……	……	……	Investment	LKR	……	……

5	…… ……	…… …	…… ….	Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
6	…… …… ……	…… …… …	…… …… ….	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……

Provide the information of <u>thermal</u> energy efficiency projects implemented

Project Description		**Duration**		**Cost Benefit**	**Units**	**Baseline Stage** **Date: 30.09.2011**	**Review Stage** **Date: 31.03.2012**
		Start date	**End date**				
1	…… …… ……	…… …… …	…… …… …..	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
2	…… …… ……	…… ……	…… …… …..	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
3	…… …… ……	…… …… .	…… …… .	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
4	…… …… ……	…… …… …..	…… …… …..	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
5	…… …… ……	…… …… …	…… …… ….	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……
6	…… …… ……	…… …… …	…… …… ….	Investment	LKR	……	……
				Annual energy saving	kWh	……	……
				Annual financial saving	LKR	……	……

<u>Thermal</u> energy savings in the form of kg of Firewood, Liters of Diesel / Furnace Oil, or in kJ.

7.8 Renewable Energy Share in Energy Source Portfolio *(Score – 50)*

Provide the answers to the below questions by checking the appropriate cage

Question		Baseline Stage Date: 30.09.2011			Review Stage Date: 31.03.2012		
		Yes	No	N/A	Yes	No	N/A
1	Do you use renewable energy sources?						
2	Do you set renewable energy targets (as a percentage of your total energy requirement)?						

Describe if '**Yes**' is the answer to Question 1

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 2

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

7.9 Non-Energy Outcome *(Score – 50)*

Provide the answers to the below questions by checking the appropriate cage

Question		Baseline Stage Date: 30.09.2011			Review Stage Date: 31.03.2012		
		Yes	No	N/A	Yes	No	N/A
1	Is your product / service "Quality" enhanced as a result of higher energy efficiencies?						
2	Is your product / service "Rejection Rate" reduced as a result of higher energy efficiencies?						
3	Is your "Waste" reduced as a result of higher energy efficiencies?						
4	Is your "Customer Satisfaction" enhanced as a result of higher energy efficiencies?						
5	Is your "Green Image" enhanced as a result of higher energy efficiencies?						

Describe if '**Yes**' is the answer to Question 1

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 2

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 3

Baseline Stage	Review Stage
.....	.....

.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 4

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

Describe if '**Yes**' is the answer to Question 5

Baseline Stage	Review Stage
.....	.....
.....	.....
.....	.....

7.10 Declaration

I declare that the information provided herein are true and correct to the best of my knowledge and understanding.

…… ……..
Date Signature of Highest-Ranking Official

☐ Mr ☐ Mrs ☐ Ms ☐ Dr
Name: ……
Title: ……
Address: ……
……
……
Telephone Number: ……
Fax Number: ……
E-mail: ……

Submission*: Completed Energy Efficiency Questionnaire must be post marked or hand delivered no later than the specified date in the calendar in Chapter 4, to* SLSEA*. This form may be copied and attached to, or bound with, other application materials.*

Abbreviations

DC	-	*Desiccated Coconut*
FA	-	*Floor Area*
GFA	-	*Gross Floor Area*
kg	-	*Kilo gram*
kJ	-	*Kilo Joules*
kW	-	*Kilo Watt*
kWh	-	*Kilo Watt Hour*
l	-	*Liter*
LKR	-	*Sri Lanka Rupees*
LPG	-	*Liquefied Petroleum Gas*
m^3	-	*Cubic meter*
MT	-	*Metric Ton*
N/A	-	*Not Applicable*
OR	-	*Occupied Rooms*
SEC	-	*Specific Energy Consumption*