

Template for Evidence(s) UI GreenMetric Questionnaire

University : Universiti Malaysia Pahang
Country : Malaysia
Web Address : <http://www.ump.edu.my/> and <http://mygreen.ump.edu.my/>

[2.0] ENERGY & CLIMATE CHANGE

[2.1] ENERGY EFFICIENT APPLIANCE USAGE

List number of efficient lighting installed at UMP

No.	Name	EFFICIENT LIGHTING		
		Total Number	Total (T5)	Total (LED)
UMP PEKAN				
1	FTKMA	2600	454	2146
2	FTKEE	2500	895	1605
3	RP5, ASRAMA 648 (3 BLOCKS)	3762		3762
4	RP5, ASRAMA 1400 (6 BLOCKS)	8389		8389
5	CTAR	2300	855	1445
6	DEWAN SERBAGUNA	1520		1520
7	PUSAT PEMBANGUNAN & PENGURUSAN HARTA	345	345	
8	RUMAH KAKITANGAN (40)	295	270	25
9	TAPAK SEMAIAN	83		83
10	PENCAWANG 11kV	202		202
11	LIBRARY	1255		1038
12	FTKPM	2520		2320
13	PTMK & PBM	3610	3426	184
14	PUSAT KESIHATAN UNIVERSITI	45		45
15	MENARA JAM	130		130
16	RUMAH KAYAK	20	20	
17	SURAU	6	6	
18	LAKE B JOGGING TRACK	80		80
19	MAIN ROAD STREET LIGHTING	372		372
20	MAIN ROAD & COMPOUND LIGHTING HOSTEL	178		178
21	FKOM	3120		3120
22	TEACHING FACTORY	370		370
23	GUARD POST (PANTAI LAGENDA)	48		48
24	GUARD POST (MAIN)	5		5
UMP GAMBANG				
1	T8 TO T5 BLOCK A1-A3, B1, B5, C1-C8, C9-C15	12,850		12,850
2	MAKMAL FKKSA	77		77
3	PBM	245		245
4	MAIN ROAD STREET LIGHTING	45		45
5	FKKSA	1520		1520
6	FIST	44		44
	TOTAL	48,536	6,271	41,848
	% EFFICIENT APPLICANCES	99.14%		



Energy saving/Led lights around UMP campuses



Sensor in all toilets



T8 florescent tube replace to T8 LED tube



Energy saving Light / LED have been install widely in UMP Pekan, Hostels, Offices, Street lights and compound lights all have been replace to energy saving bulbs or lanterns.



Energy saving Light / LED have been install widely in UMP Pekan, Hostels, Offices, Street lights and compound lights all have been replace to energy saving bulbs or lanterns.



High bay LED lighting in Teaching Laboratory at Gambang Campus (installed 2019)

Description:

- Below is the list of initiatives that have been taken by UMP to reduce energy by using Efficient Appliances and to reduce CO² consumption in campus.

Energy Savings Measures Executed in UMP Pekan and Gambang (2012-2022)

UMP Campus Pekan

Initiatives		Numbers	Estimate kWh Saving Per Month
1	Replacement of Energy-Saving Light bulbs for main road street lighting and compound lighting at Faculty of Electric & Electronics & Faculty of Mechanical Engineering, UMP Pekan	372	41,555.20
2	LED compound lighting for jogging track in UMP Pekan	80	5,472.00
3	Replacement of T8 to T5 fluorescent tubes for corridors and walkways at Faculty of Electric & Electronics, UMP Pekan	454	1,307.52
4	Replacement of T8 to T5 tubes for corridors and walkways at Faculty of Mechanical Engineering, UMP Pekan	895	2,577.60
5	Replacement of T8 to T5 tubes (asrama 648) for building, corridors and walkways at UMP Hostel Pekan	3762	40,629.60
6	Replacement of T8 to T5 tubes (asrama 1400) for building, corridors and walkways at UMP Hostel Pekan	6889	33,067.20
7	Installation of internal digital electricity meter for each block in every department in UMP Pekan	14	Awareness Program
8	Replacement of electriclight bulbs for main road street lighting and compound lighting at Hostel UMP Pekan	178	12,175.20
9	Replacement of T8 to T5 tubes at Administration Block of Faculty of Mechanical Engineering and Faculty of Electric & Electronics, UMP Pekan	1542	4,440.96
10	Replacement of T8 to LED tubes at UMP Students Hostel, UMP Pekan	610	6,588.00

11	Installation of 20-kW roof-top solar panels (Monocrystalline & Polycrystalline) at Administration Block, Faculty of Mechanical Engineering, UMP Pekan	20kW	3,870.00
12	Replacement of conventional to LED bulbs at Faculty of Manufacturing, UMP	133	3,351.60
13	Upgrading of street and compound lightings for Pekan Library Area	40	4,464.00
14	Installation of light motion sensors at toilets in UMP Pekan	100	3,744.20
15	Upgrading from conventional lights to energy-efficient lights in CTAR, UMP Pekan	64	3,778.60
16	Upgrading from conventional to energy-savings bulbs (1400 nos) in Blocks H and I, UMP Pekan	1500	16,210.00
17	Green Awareness Campaign	-	Awareness Program
18	Installation of PV panels in all gazebo units	20	1,070.00
19	Acknowledgement of GreenTech Malaysia and Sustainable Energy Development Agency (SEDA) of UMP's initiatives towards integrated energy-savings and CO2 emissions reduction initiatives, with SEDA allocating a RM55,000 grant for conduct of an energy audit in UMP Pekan Library	-	Awareness Program
20	Installation of solar-powered LED lights with motion sensors	10	2,160.00
21	Installation of solar-powered LED lights with motion sensors	10	2,160.00
22	Installation motion sensor and energy saving light, LED 18W at Sports Hall, UMP Pekan	15	4,500.00
23	Retrofitting conventional light to LED 18W light at Library, UMP Pekan	1000	10,800.00
24	2 nd phase Installation of light motion sensors at toilets in UMP Pekan that controlled lighting & exhaust fan	83	3,888.00

UMP Campus Gambang

Initiatives		Numbers	kWH Saving Per Month
1	Replacement of T8 to T5 fluorescent tubes in UMP Gambang: Block B5 KPU and UMPH Block B1, A1-A3 Block C1-C8 Block C9-C15	12,850	48,061.63
2	Green Awareness Campaign	-	Awareness Program
3	Installation of PV panels in all gazebo units	20	1,070.00
4	Installation of solar-powered LED lights with motion sensors	10	2,160.00
5	Upgrading from metal halides to LED light in high-bay area in FKKSA Laboratory Area, UMP Gambang (400W to 190W)	58 Nos	6,222.33

UMP Green Awareness Initiatives :







SAVE WATER

- USE DUAL-FLUSHING SYSTEM FOR TOILETS.
- MONITOR YOUR WATER USAGE.
- ENSURE TAP ARE TURNED OFF TIGHTLY.
- REPAIR LEAKAGES IMMEDIATELY TO AVOID WASTAGE.



3R : REDUCE – REUSE – RECYCLE

- PRINT OR MAKE A COPIES ONLY WHEN NECESSARY AND USED BOTH SIDES OF PAPER.
- PRINT DRAFT COPIES ON USED PAPERS.
- RE-USED ENVELOPS AND OLD FILES.
- USED RECYCLE BINS CORRECTLY.
- ORDER FOOD FOR MEETINGS/EVENTS AS NEEDED.
- SPARE A THOUGHT. THINK BEFORE DISPOSING.



TRANSPORTATION

- USED PUBLIC TRANSPORT OR CAR-POOL.
- USE PARK-AND-RIDE FACILITIES TO REDUCE PARKING CONGESTION.



ENVIRONMENT – FRIENDLY PRODUCTS

- USED BIODEGRADABLE CLEANING PRODUCTS OR DETERGENTS.
- ENCOURAGE GREEN PROCUREMENT.
- AVOID USING PLASTIC WATER BOTTLES.
- SET THE TEMPERATURE OF AIRCOND BETWEEN 24°C – 26°C
- USED ENVIRONMENT – FRIENDLY FOOD WRAPPERS/CONTAINERS.



SAVE ENERGY

- TURN OFF ALL UNNECESSARY LIGHTS.
- USE STAIRS
- SWITCH YOUR PC TO “SLEEP” MODE WHEN UNUSED.
- USE ELECTRICAL PRODUCT WISELY.
- KEEP WINDOWS SHUT WHEN THE AIR-CONDITIONER IS SWITCHED ON.
- ENSURE ALL ELECTRICAL ITEMS ARE TURNED OFF BEFORE LEAVING THE OFFICE.
- USE ENERGY-EFFICIENT LIGHTS/BULBS.

mygreen.ump.edu.my





Go Green Tips

-  LESS PLASTICS
-  BIOFUEL
-  RECYCLE
-  KEEP CLEAN
-  2-SIDED PRINTING



EKSO
 UNIVERSITI TERBUKA PAHANG
 By Promotion Committee
 (Research & Innovation Department) 2018

AUDIT

