

New Efficient Electrical Energy Management Activities/ Projects to be Implemented

No.	CER#	Final Tender Cost (RM)	CER Description	Brief Description	Baseline Consumption (kWhr)	Target Consumption (kWhr)	Estimated Investment Cost (RM)	Estimated Savings/ Year			Return of Investment (Yr)	Remark/ Comment(s)
								kWhr	RM	Percentage		
1	CM2016-3-9-00002	317,096	New Zero Loss Heated Air Dryer for the Compressed Air System - S Site	To replace the 2% lost compressed air dryer with 0% lost dryer.	453,024	95,832	317,096	357,192	116,002	79%	2.71	Received New Dryer on 24th Mar. Dryer T&C on 2017 MAY 18
2	Charge Out	19,800	Convert production floor fluorescent tube to LED tube ~1,100 pcs	To convert 1,100 units of fluorescent tubes to LED tubes. (additional areas)	293,438	163,394	19,800	130,044	42,024	44%	0.47	Project Completed on Sep'17
3	Charge Out	72,400	Vacuum Piping and Headers Upgrading Project	Existing Vacuum Piping and Headers undersized. Have to upgrade them to minimize Pressure drop.	1,629,144	1,306,800	72,400	322,344	105,006	20%	0.69	Projected Completion: By end Apr/2018.
4	CM2017-3-9-00003	697,700	New Centrifugal Air Compressor to replace the inefficient Old Screw Type Air Compressors (~20 years old)	Centrifugal Type is more efficient than the Screw Type Air Compressors. And, the efficiency drop of the 20 years old equipment vs the new equipment.	4,333,056	3,062,842	697,700	1,270,214	415,060	29%	1.68	Projected Completion: By end May/2018.
5	CM2016-3-7-00002	Prepare Tender document	S-Site Main & N Building Chiller System Improvement	To phase out 3 units of R11 Refrigerant Gas Chillers, and Improve N building chiller water pump efficiency. Projected Total Annual Cost Saving of RM 1,315K	20,432,000	16,894,600	#REF!	3,537,400	1,156,700	17%	#REF!	Project In Progress: New Chiller #1 T&C on 2018 JAN 11 New Chiller #2 T&C on 2018 FEB 08
6	No Cost	No Cost	Optimization of the AHU operation at the Building N Level 1 - MLPN EOL	Turn Off 1 unit of AHU (17kW) after doing adjustment/balancing.	148,512	-	#REF!	148,512	49,052	100%	-	Project Completion By 2018 FEB 08

7	Charge Out	TBA	Scrubber # 3, Install Voltage Regulator regulate the motor.	To install Voltage Regulator regulate the motor power usage for better efficiency (Scrubber #3)	322,344	225,641	21,000	96,703	31,22	30%	0.66	Project Completion By end Nov/2017.
8	Charge Out	TBA	Scrubber # 6, Install Voltage Regulator regulate the motor.	To install Voltage Regulator regulate the motor power usage for better efficiency (Scrubber #6)	322,344	225,641	12,000	96,703	31,22	30%	0.38	Project Completion By end Nov/2017.

Sub total, RM **1,949,818**

No.	CER#	Final Tender Cost (RM)	CER Description	Brief Description	Baseline Consumption (m3)	Target Consumption (m3)	Estimated Investment Cost (RM)	Estimated Savings/ Year			Return of Investment (Yr)	Remark/ Comment(s)
								m3	RM	Percentage		
8	CM2016-2-0-00002	235,000	Reclaim Reverse Osmosis Rejected Water.	Reclaim RO reject water as raw water & treated / re-generated as DI water.	140,481	26,136	235,000	114,345	156,83	81%	1.50	Project Completed on end Jul 17 Cost Saving generated on FY17/18 Q1, Q2, Q3, Q4.

Grand total saving Amount, RM **2,106,601**

Grand Total Energy Saving, kWh/year **5,959,113**

Grand Total CO₂ Avoidance, metric ton/year **4,187,909**