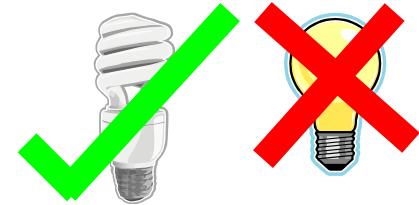


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ENERGY EFFICIENCY



MOSES MAMMUSA GABRIEL CAMPBELL
Snr. ELECTRICITY ENGINEER



Presentation Outline

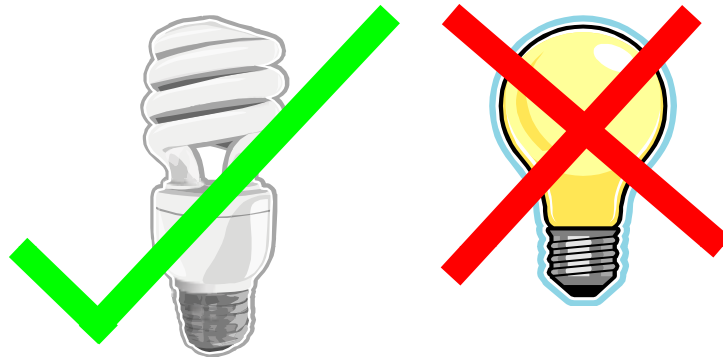
1. *PURA's Mandate*
2. *ES Lamps*
3. *EE activities*
4. *Energy Management System*
5. *Electricity meter model*
5. *Regulation Targets*
6. *Energy saving tips*
7. *Conclusion*
8. *Recommendations*



PURA - MANDATE

- *PURA Act 2001*
- *Promotion of Competition*
- *Ensure Efficient Operations*
- *Introduction of New & Innovative Technologies*
- *Services - Affordable*
 - *Available*
 - *Accessible*
- *Sensitize Public*

Energy saving lamps



ES lamps:

- **Save energy**
- **Use 80% less energy**
- **less heat**
- **lower bills**
- **environmentally friendly**
- **less CO2 emission**
- **improve system voltage & stability**

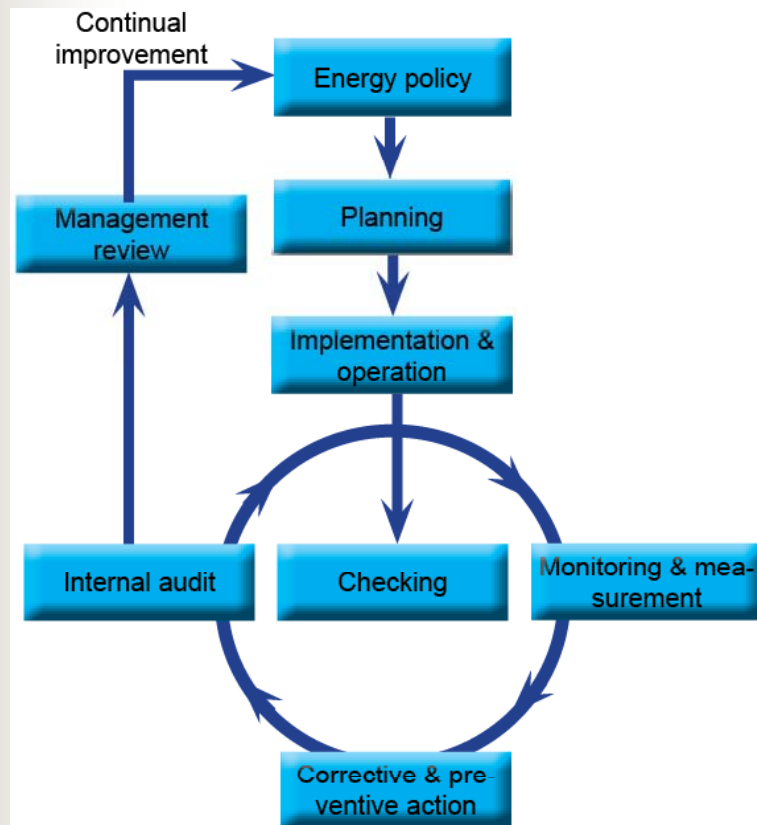


PURA EE PROJECTS

- 1. 2000 CFLs – Kanifing*
- 2. 1000 CFLs – Banjul*
- 3. Street Lights Research*
- 4. Awareness Program*

ISO 50001

Energy Management System



PLAN

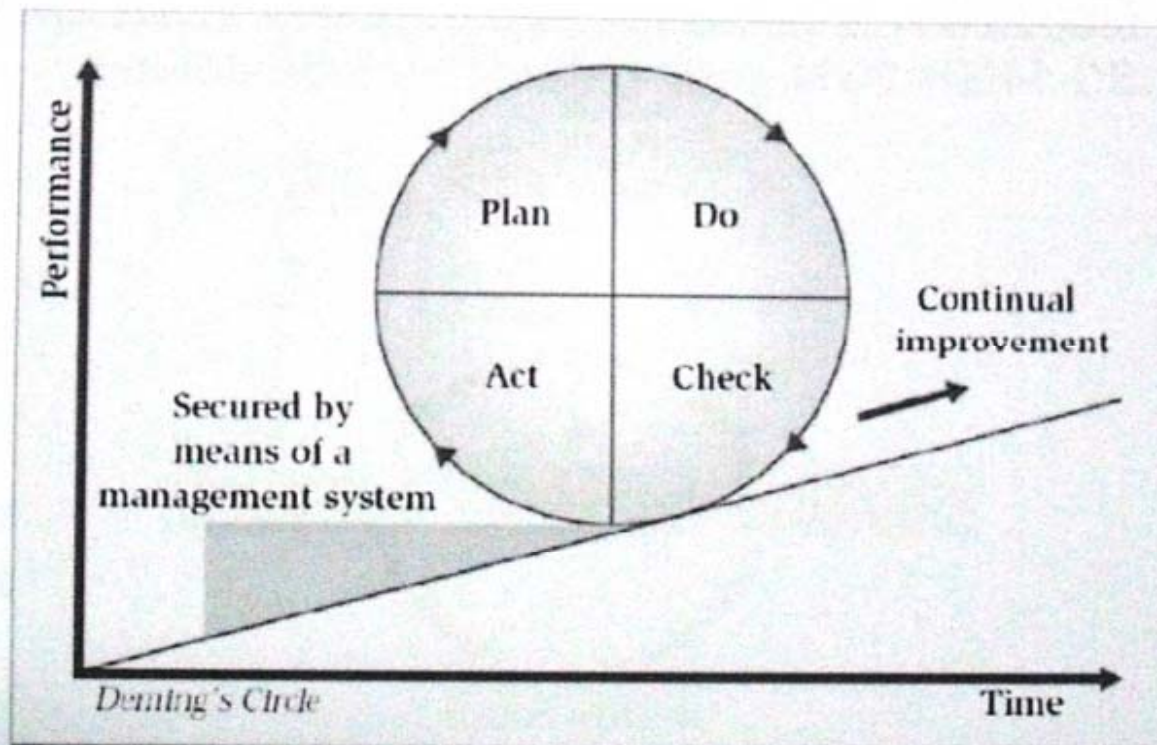
DO

CHECK

ACT

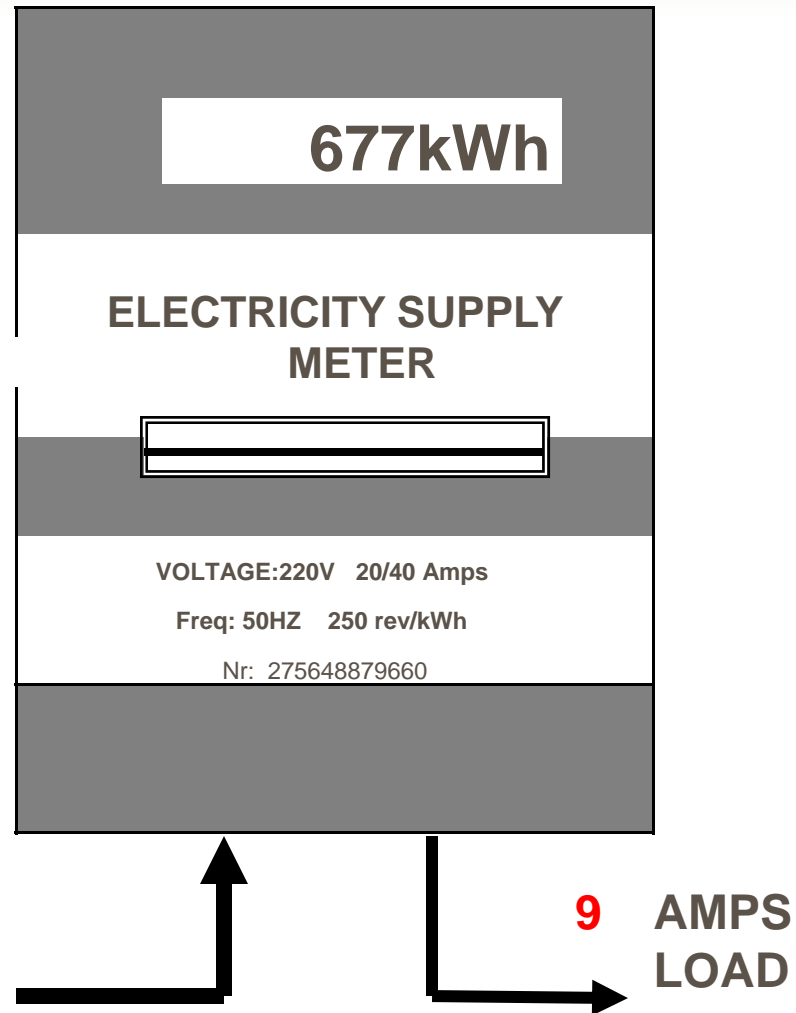
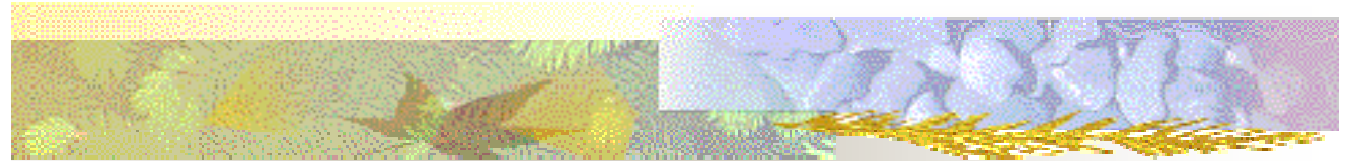


Deming's Circle



Electricity Meter Model

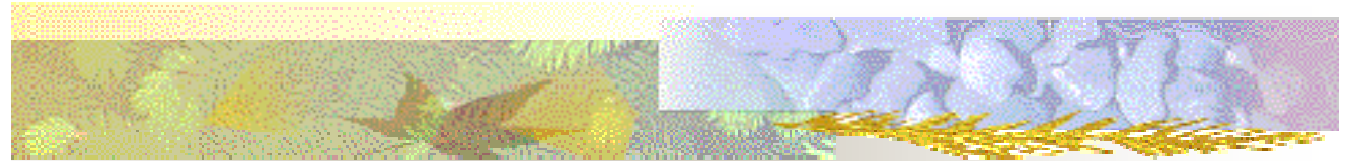
TOURE									TARIFF			
									Calculation of Dalasis Equivalent			
	APPLIANCES	No.	(W)	kW	Tot kW	HOURS	KWh/Day	kWh/Mth	Band 1	Band 2	Band 3	Band 4
1	TV		100	0.10	-	6	-	-	1.92 40 kWh C-TOT 40 (0-40kWh)	6.20 560 kWh C-TOT 560 (41-600)	6.65 76.80 kWh C-TOT 76.80 (601-1000)	7.6 0 0 0 0 0 0 0 (Over 1000)
2	Video		25	0.03	-	6	-	-				
3	W/Dispenser		125	0.13	-	6	-	-				
4	Sew Mach		250	0.25	-	12	-	-				
	F/FREEZER		250	0.25	-	12	-	-				
5	D/FREEZER		250	0.25	-	6	-	-				
	RADIO		75	0.08	-	0.5	-	-				
6	E/IRON		2,000	2.00	-	6	-	-				
7	AIRCO		6,000	6.00	-	4	-	-				
8	FRIDGE		150	0.15	-	18	-	-				
9	STEREO		250	0.25	-	7	-	-				
10	C/FAN		150	0.15	-	4	-	-				
11	FAN		75	0.08	-	7	-	-				
12	COMPUTER		250	0.25	-	5	-	-				
13	E.S. Lamp		9	0.01	-	6	-	-				
14	FL Lamp		36	0.04	-	6	-	-				
	LAMPS	47	40	0.04	1.88	12	22.6	676.80				
	TAPE				1.88	123.50	22.56	676.80	76.80	3,472.00	510.72	0
	TOTAL											





Regulation Targets

- *1. Inspection & Certification*
- *2. Type Approval*
- *3. RE Projects*



Energy Saving Tips



---Change lamps to Energy Savers

REFRIDGERATORS: Do not leave doors open for long

AIR CONDITIONERS: Do not operate with windows open

LIGHTING: Use Natural illumination

Switch off if not required

TENNANTS: Use Slave Meters

CASHPOWER: Eliminates Billing & Arrears

SMALL SCALL IPP: Use of Solar Energy

WATER HEATERS: Use 60 degree setting to avoid calcium





Conclusion

Our World is rapidly being destroyed by manmade pollution of the atmosphere resulting in depletion of the protective ozone layer and increase in global temperatures called global warming. It is time we act and do so collectively to reduce the drastic effects of climate change, by Adopting new and renewable clean technologies to fulfil our daily energy requirements. We do not inherit the Earth from our ancestors but rather we have borrowed it from our children so we owe it to them to have sustainable solutions to the problems posed by climate change.



Recommendations

- 1. Create incentives and encourage widespread use of Solar**
- 2. Replace existing Provincial Power Stations with Solar Power Plants**
- 3. Shift from Oil based Generation to Renewable forms of power generation.**
- 4. Develop a legal framework for the RE sector.**
- 5. Ban both the importation and use of incandescent lamps**
- 6. Implement a type approval regime**
- 7. Start testing and certification of installations.**



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THANK YOU



FOR YOUR ATTENTION