

NATIONAL ENERGY EFFICIENCY AWARENESS CAMPAIGN



Hi friends, I'm SWITCH. I will guide you to be more energy efficient through our simple Energy Guide Book. Remember, **SWITCH!** **SWITCH** off when you are not using **SWITCH** to Energy Efficient products

ENERGY GUIDE BOOK (FOR CONSUMERS)

Dear friends, log on to www.switch.org.my to check how much electrical energy you consume in your house. Don't forget to PLEDGE to reduce the usage as well!

Jointly organised by:

Implemented by:

Supported by:





SWITCH



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NATIONAL ENERGY EFFICIENCY AWARENESS CAMPAIGN (SWITCH!)

Energy is one of the foundations in developing a country. The main issue is the ability of a country to cater to the needs of the people and the ever increasing energy cost concurrently. Domestic, commercial and industrial consumers must realise the importance of 'efficiency' in the usage of energy and to play our roles and responsibility together with the government.

Realising this, Water and Energy Consumer Association of Malaysia (WECAM) or formerly known as Environment Desk of FOMCA has developed a 10 year framework known as National Energy Efficiency Plan. This campaign is the first step in the implementation of the plan. This campaign is also supported by the Ministry of Energy, Green Technology, and Water (formerly known as Ministry of Energy, Water and Communications), Energy Commission, Tenaga Nasional Berhad, and the National Energy Centre.

SWITCH! is an effort by Non-Government Organisation (NGO) with the support from government and industries for the benefit of the people and country.

SWITCH!

SWITCH off when you are not using

SWITCH to Energy Efficient products

MAIN OBJECTIVES

- I. To raise the awareness of Malaysians regarding the concept of energy conservation;
- II. To promote the practice of energy efficiency among domestic, commercial and industrial consumers;
- III. To encourage the use of Energy Efficient equipments among domestic, commercial and industrial consumers.



CAMPAIGN CORE AIMS

The campaign will convey simple and exact messages to consumers on the issue of energy conservation and energy efficiency through:

- Practical conservation tips
- Billing facts
- Energy usage chart
- Auditing energy usage in homes and work place
- Interactive activities
- Awareness of energy efficient products

This booklet is developed by Persatuan Pengguna Air Dan Tenaga Malaysia (WECAM) for the purpose of National Energy Efficiency Awareness Campaign (SWITCH). The booklet is a copyright of WECAM.

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PART 1: WHAT IS ENERGY?



Energy is the ability to do work. Energy comes in many different forms like heat, light, mechanical, electrical, and chemical. Do you know that we use energy daily to do everything? You use energy when making your favourite nasi lemak to sending astronauts to space. As we know there are two types of energy, energy that is stored (potential energy) and energy that is in motion (kinetic energy).

For example, your daily food contains chemical energy which will be stored in your body and will be released when you work or play.

1.1 Do you know the energy resources?

There are many resources of energy that we use daily. These resources store energy in different ways. These energy resources are divided into two main groups, **Renewable Energy resources (RE)** and **Non-Renewable Energy resources (NRE)**.

RE resources can be naturally replenished in a short period of time. These are wind, solar, water, biomass and geothermal energy.

NRE resources are finite (limited) and they will eventually deplete (finish) like petroleum, coal, natural gas and nuclear (Uranium, Plutonium, etc.).

1.2 Do you know that all the NRE resources are expensive?

They are expensive because these resources are limited. They will deplete one day. These energy resources are converted from one form to another to enable humans to consume it. If we consume it wastefully, energy resources may cost higher in future. Furthermore, the more we use, the more we pollute the environment. Many of the energy resources used now are from fossil fuel which is the highest air pollution contributor. The RE in most cases is expensive to build but in long term it is much reliable and cost effective.



PART 2: WHAT IS ELECTRICAL ENERGY?

Electricity or Electrical Energy is generated when our energy resources are converted through a process. This is how electricity is generated:

Energy Resource → Heat → Kinetic → Electricity
(Most NRE and some RE)

Energy Resource → Kinetic → Electricity
(Most RE)

During the energy conversion process into Electrical Energy, much of the energy is lost due to certain processes. In other words, production of electricity consumes a lot of energy resources. This is reflected as the cost of electricity that we have to pay.

2.1 How Does Electricity Reach Your Home?



I am going to explain to you how electricity reaches your home.

There are generally 4 major steps for electricity to reach to your house from the power plant. It might be slightly different from country to country, or from one geographical location to another, but the general processes are pretty much the same.

Step 1

Power Plant – this is where energy resources are converted into electricity. This conversion process is known as energy generation and it contributes to the cost of electricity the most.





Step 2

Transmission – here we can see huge steel structures with lines where electricity will flow through them before getting to consumers. You should not go near these areas. They are dangerous!

Step 3

Medium Voltage Distribution – electricity is later distributed to industrial users. Industrial users consume a lot electricity to carry out their daily activities.



Step 4

Low Voltage Distribution – for you and me, as well as small offices we get electricity through this system. This system supply up to 450 Volt and for houses we usually use 240 Volt. Friends, the cycle is now complete.



**My dear Friends,
do not play with electricity.
It is dangerous and it can KILL.
BEWARE!!!**



PART 3: HOW DO WE CARRY OUT AN ENERGY AUDIT?

An energy audit is a study or survey of energy usage. The objective is to identify energy-saving opportunities. For home owners, it can be defined as a check of how the energy is being used or if there is a wastage.

3.1 Steps to Carry Out an Energy Audit

STEP 1: Identify equipments and its quantity at your home
(For example *Refrigerator: 1 unit, Computers: 2 units*)

STEP 2: Identify Energy usage. You need either one of the combination below:

Power (unit is Watt - W) value



Picture 1: From the product label we can identify the following: the power value is 175 Watt.

Caution: If the Power value is in kiloWatt or kW, for example 1.2 kW, it is equivalent to 1200 Watt. 1 kiloWatt (kW) = 1000 Watt(W)

OR

Voltage (unit is Volt - V) and Current (unit is Ampere - A) values



Picture 2: From the product label we can identify the following. The Voltage is 120 Volt (V) and Current is 4 Ampere (A).

Caution: If the Current value is in miliAmpere or mA, for example, 850 mA, it is equivalent to 0.85A. 1000 miliAmpere (mA) = 1Ampere (A)



STEP 3: Identify usage period in hours

STEP 4: Computation of usage to kilo Watt hour (kWh)

STEP 5: Finally you will be able to estimate your electricity cost by calculating the usage in kWh against your tariff

Friends, do you know what is kWh?

It is an abbreviation for **kilo Watt hour**. This unit is important for us to calculate the energy usage. This will help us audit our energy usage. These formulas can be used to estimate the cost of using electrical appliances.



Firstly, calculate total energy used in kWh unit.

$$\text{kWh} = \text{Power (in watt)} \times \text{duration of appliance used (in hour)} / 1000$$

Then, you can calculate the cost of energy.

$$\text{Cost of energy} = \text{Energy used (in kWh)} \times \text{electricity tariff}$$

Example:

Firdaus watches TV for one hour every day. He found out that his TV has a label which reads: 240 V/ 300W. Calculate how much the cost of electricity for the TV is, if he watches the series for one month (30 days)? Given that the cost of one unit of electricity (1 kWh) is RM 0.218.

Step 1: Determine the total energy used in kWh for one day.
Energy used per day = $300\text{W} \times 1 \text{ hour} / 1000 = \mathbf{0.3 \text{ kWh}}$

Step 2: Calculate the cost of energy.
Cost of energy per day = $0.3 \text{ kWh} \times 0.218 = \mathbf{RM 0.06}$

Step 3: Calculate the total cost for a month (30 days).
Cost energy for a month = $\text{RM } 0.06 \times 30 = \mathbf{RM 1.80}$

Firdaus uses **RM 1.80** since he watches TV for an hour everyday in a month. If he watches for 5 hours a day, he has to pay **RM 9.00** per month for the electricity he uses.



3.2 How to calculate your electricity bill using our website?

LOG ON TO www.switch.org.my and click Calculate Your Bill at FUN CORNER.

1. This calculator is to estimate the energy usage; it is not an exact value.
2. Identify values that need to be tabulated. Voltage in Malaysia can be taken as 220 V to 240 V. However, some products like laptops and phone may use lower Voltage value. Checking the label helps you identify the Voltage better.
3. If you can only obtain Power value from the label as shown in Picture 1 (Refer to page 8)
 - a. STEP 1: Proconsole, 1 Unit
 - b. STEP 2: 175 Watt (Power value)
 - c. STEP 3: use 6 hours daily for 30 days
 - d. STEP 4: Key in all the values to the online calculator as shown below. After that, press Add Equipment once completed.

> Fun Corner > Calculate Your Bill

Calculate Your Bill

Text Size A A A

Print Email PDF

HOW TO USE THE CALCULATOR

(Note: You may can enter either Volt (V) and Current (A) or Power (P) only.)

Equipment	PROCONSOLE	Current (A)	
Quantity	1		
Volt (V)			
Power (P)	175	Day	30
Hour per day	6		

Add Equipment Delete Equipment

No	Equipment	Quantity	Volt(V)	Current(A)	Power(P)	Hour per day	Day	Kilo Watts Hour (kWh)
<input type="checkbox"/>	1 Lights	15			100	4	30	180.00
<input type="checkbox"/>	2 Fridge	1			400	24	30	288.00
<input type="checkbox"/>	3 TV	1			300	3	30	27.00
<input type="checkbox"/>	4 Air Conditioner	2			900	6	30	324.00
<input type="checkbox"/>	5 Washing Machine	1			500	1	8	4.00
<input type="checkbox"/>	6 Shower water heater	1			3300	0.5	30	49.50
Total:								872.50

Your Current Bill = RM289.43



4. If you can only obtain Voltage and Current value from label as shown in Picture 2 (Refer to page 8)
 - a. STEP 1: Drill, 1 Unit
 - b. STEP 2: 120 Volt (V) and 4 Ampere (A)
 - c. STEP 3: use 2 hours daily for 15 days
 - d. STEP 4: Key in all the values to the online calculator as shown below. Then, press Add Equipment once completed.

> Fun Corner > Calculate Your Bill

Calculate Your Bill

Text Size A A A

Print Email PDF

HOW TO USE THE CALCULATOR

(Note: You may can enter either Volt (V) and Current (A) or Power (P) only.)

Equipment	DRILL		
Quantity	1		
Volt (V)	120	Current (A)	4
Power (P)			
Hour per day	2	Day	15

Add Equipment Delete Equipment

No	Equipment	Quantity	Volt(V)	Current(A)	Power(P)	Hour per day	Day	Kilo Watts Hour (kWh)
<input type="checkbox"/>	1 Lights	15			100	4	30	180.00
<input type="checkbox"/>	2 Fridge	1			400	24	30	288.00
<input type="checkbox"/>	3 TV	1			300	3	30	27.00
<input type="checkbox"/>	4 Air Conditioner	2			900	6	30	324.00
<input type="checkbox"/>	5 Washing Machine	1			500	1	8	4.00
<input type="checkbox"/>	6 Shower water heater	1			3300	0.5	30	49.50
Total:								872.50

Your Current Bill = RM289.43



Since you can audit energy usage at home, your family can pledge to reduce energy usage on our website www.switch.org.my. **MYSTERY PRICES AWAIT BEST ACHIEVERS.**



3.3 Benefits of Energy Audit

Energy audit provides essential information on how much, where and how energy is used daily by us. Energy audit is also done to look for opportunities to reduce the amount of energy usage. You can inform your friends as well the benefits of doing an energy audit include:

- Making your house more energy efficient
- Saving money
- Reducing climate change through reducing your carbon footprint.

3.4 Electricity Tariff (Domestic)

TARIFF CATEGORY	RATES (RM/kWh)
Tariff A - Domestic Tariff	
For Monthly Consumption Between 0-400 kWh/month	
For the first 200 kWh (1 → 200 kWh) per month	0.218
For the next 200 kWh (201 → 400 kWh) per month	0.345
The minimum monthly charge is RM3.00	
For Monthly Consumption More Than 400 kWh/month	
For the first 500kWh (1 → 500kWh) per month	0.300
For the next 100 kWh (501 → 600kWh) per month	0.390
For the next 100 kWh (601 → 700kWh) per month	0.400
For the next 100 kWh (701 → 800kWh) per month	0.410
For the next 100 kWh (801 → 900kWh) per month	0.430
For the next kWh (901 kWh onwards) per month	0.460
The minimum monthly charge is RM3.00	

(Source: TNB.com, 2009)



3.5 Calculating your bill

Example 1:

To calculate your bill, refer to the units of energy used (kWh) in your bill.

For example, 2931 kWh is used by Mr. Keith in a particular month.

Step 1: Check the correct tariff category.

For Mr. Keith, he should refer to 'For Monthly Consumption More Than 400 kWh/month'.

Step 2: Calculate the amount payable according to the electricity tariff. For this example, it is:

For Monthly Consumption More Than 400 kWh/month	Usage (kWh)	Tariff (RM/kWh)	Amount payable (RM)
For the first 500kWh (1 → 500kWh) per month	500	0.300	150.00
For the next 100 kWh (501 → 600kWh) per month	100	0.390	39.00
For the next 100 kWh (601 → 700kWh) per month	100	0.400	40.00
For the next 100 kWh (701 → 800kWh) per month	100	0.410	41.00
For the next 100 kWh (801 → 900kWh) per month	100	0.430	43.00
For the next kWh (901 kWh onwards) per month	2031	0.460	934.26
Total Amount	2931	-	1247.26

Therefore, the total amount payable for Mr. Keith is **RM 1247.26**.

Example 2:

Here, 328 kWh is used by Mr. Ahmad on a particular month.

Step 1: Check the correct tariff category.

For Mr. Ahmad, he should refer to 'For Monthly Consumption Between 0 - 400 kWh/month'.



Step 2: Calculate the amount payable according to the electricity tariff. For this example, it is:

For Monthly Consumption 0 - 400 kWh/month	Usage (kWh)	Tariff (RM/kWh)	Amount payable (RM)
For the first 200 kWh (1 → 200 kWh) per month	200	0.218	43.60
For the next 200 kWh (201 → 400 kWh) per month	128	0.345	44.16
Total Amount	2931	-	87.76

3.6 Comparing the results of Energy Audit results

As a consumer we must be able to calculate the electricity cost. This will help us to identify parts where energy is lost or wasted. Here are some situations to consider.

Situation 1

From the energy audit, you find that your air-conditioner is consuming too much power.

Tips:

The air-conditioner might be oversized compared to the room requirement. This will make the air-conditioner turn on and off automatically more than necessary, wasting energy and will put a strain on the compressor. Therefore, the next time you buy an air-conditioner, you can choose the ones that is appropriate for your room size (refer Table 1). Right product gives you high efficiency. You can also clean the filter of air-conditioners more often, since dust can reduce its efficiency.



Room size	Air-conditioner power load (hp)
12 x 12 feet	<1
14 x 14 feet	1 – 1.5
14 x 16 feet	1.5
15 x 16 feet	1.5 – 2.0
18 x 18 feet	2.0 – 2.5
21 x 21 feet	2.5 – 3.0

Table 1: Suitable Air-Conditioner Size for Your Room

Situation 2

Another example is that you switch on the lights longer than necessary.

Tips:

You can switch to energy efficient light bulbs. You can purchase electrical sockets that have timers so that it would switch off after a certain time. You can rely on natural lighting by opening the windows. You can also plan your interior design as to take full advantage of the daylight.





Situation 3

Again, from energy audit, you find that your refrigerator uses more energy than it is supposed to.

Tips:

You can test the seal of the door. The gasket might be loose, and warm air is leaking into the interior. To check the seal, place a RM 1 Ringgit note at the door frame and tug it gently to see if it held firmly in place.

You can also check the temperature. Keeping your fridge too cold is a waste of energy and can ruin the food. The ideal temperature is between 3 – 4°C.

One factor which makes the fridge inefficient is that the condenser coils become dusty. Remove cover panel of the coil and vacuum it until it is clean. This should be done approximately every three months.

Another factor is that your refrigerator could be of an old model. It is worth considering a new fridge with a 5-star energy efficiency. You can save more than 25% of your refrigerator's electricity cost. Select a size suitable for your household. Remember, the bigger the refrigerator, the higher the cost of your electricity bill!

Situation 4

You wash your clothes twice a week regardless of the fact that it is full load or otherwise.



Tips:

Wait for full load before washing. Make sure the water level is appropriate.

Having an energy efficient house not only means good citizenship, but it also means that electricity and water bills would not dig too deeply into your pockets. You can save by doing an energy audit.



PART 4: IDENTIFICATION OF ENERGY EFFICIENT PRODUCTS

By making an energy audit, you will have the chance to create an energy efficient house to live in. This is because we can identify where the energy is being wasted.

4.1 Let's Be Energy Efficient

Simple ways to be energy efficient at home:

- Switch off appliance when they are not in use
- Get your parents to ensure that the appliances are operating in good condition
- For more information check out our consumer tips at www.switch.org.my

4.2 Buying Energy Efficient Product



DO YOU KNOW THAT AN ENERGY EFFICIENT PRODUCT WILL DO THE SAME AMOUNT OF JOB AS A NORMAL PRODUCT BUT USES LESS ELECTRICITY? Yes, this means that you can save more money and help to reduce global warming.

Another way of being Energy Efficient is to buy products that consume less electrical energy. These energy efficient products use less electricity but do the same amount of work as other non energy efficient products. This will help you and your family saves a lot of money in the long run.

However, how do you identify them?

Most of these energy efficient products carry ENERGY RATING LABELS to help you choose the correct products. Now, let us see some Energy Rating Labels in the next page.



Energy Rating Labels



In Malaysia, **Energy Star logo** is under the supervision of Energy Commission and SIRIM since 2006. For now this label is only available for Refrigerators. The blue circle shows the average annual usage of electricity. The more stars a product obtains, the more energy efficient it is. Currently, Energy Commission is developing labels similar to this for other electrical products.

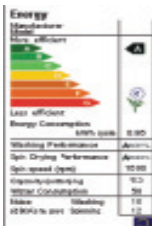
Some of the friendly labels you MUST know (see below).



United States of America uses simple notification label. This star energy label does not declare the saving percentage but just declares that the product is energy efficient.



Australia, New Zealand and Thailand use this label. This star label is very similar to Malaysian label. But they are widely used in those countries. The more stars in the label means the equipment is **MORE ENERGY EFFICIENT**.



European Union uses mandatory (compulsory) label for all electrical and electronic products. Colored Bar Code is rated from A to G. A is most efficient and G is not efficient. This label is even used in cars that are sold in Europe.



When you buy electrical appliances, there is an easy way to recognize how efficient your equipment is by looking for the **Energy Star label**.



4.3 How to compare products for EFFICIENCY using our website?

LOG ON TO www.switch.org.my and click \$\$\$ vs Efficiency at FUN CORNER.

1. Identify values that need to be tabulated. Since you have already learnt how to get Voltage, Current and Power, we will look at an example of calculation.
2. Let us look at some simple example on how to key in the data.
 - a. Step 1, list down the equipments you plan to purchase (example). Make sure you have the data of power (or voltage and current), cost of purchase and duration of use in a day with you.
 - i. Air Conditioner A – 1000 Watt, RM 1000.00, 8 hours
 - ii. Air Conditioner B – 900 Watt, RM 1200.00, 8 hours
 - iii. Air Conditioner C – 800 Watt, RM 1400.00, 8 hours
 - b. Step 2, key in the values to the calculator

> Fun Corner > \$\$\$ vs Efficiency

\$\$\$ vs Efficiency

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(Note: You may can enter either Volt (V) and Current (A) or Power (P) only.)

Equipment	<input type="text" value="Air Cond A"/>	
Price (RM)	<input type="text" value="1000"/>	
Volt (V)	<input type="text"/>	Current (A) <input type="text"/>
Power (W)	<input type="text" value="1000"/>	
Hour per day	<input type="text" value="8"/>	

Add Equipment

Delete Equipment

No	Equipment	Price (RM)	Volt(V)	Current(A)	Power(W)	Hour per day
----	-----------	------------	---------	------------	----------	--------------

No	Equipment	Bill Amount (RM)				Efficiency Rank
		1 Day	1 Month	1 Year	5 Years	

Rank 1 = very cost efficiency



- c. Step 3, Once you key in the data, press Add Equipment. After you key in the three set of data completely, you will be able to see the ranking as below:

No	Equipment	Price (RM)	Volt(V)	Current(A)	Power(W)	Hour per day
<input type="checkbox"/>	1 Air Cond A	1000			1000	8
<input type="checkbox"/>	2 Air Cond B	1200			900	8
<input type="checkbox"/>	3 Air Cond C	1400			800	8

No	Equipment	Bill Amount (RM)				Efficiency Rank
		1 Day	1 Month	1 Year	5 Years	
1	Air Cond A	1.74	52.32	636.56	3182.80	3
2	Air Cond B	1.57	47.09	572.90	2864.52	2
3	Air Cond C	1.40	41.86	509.25	2546.24	1

Rank 1 = very cost efficiency

- d. Step 4, Air Cond C is ranked 1 because it helps you to save more money in 5 years time compare to Air Cond A and Air Cond B.

PART 5: ELECTRICITY CAN KILL IF ...

5.1 Purchasing an Electrical Appliance

First of all, there are some important details to look out for when you are buying your electrical appliance.

- The appliance should be suitable for local electrical supply of 240 volts AC and frequency of 50 Hz
- The appliance should preferably be tested and certified by a national or reputed standards testing authority (e.g. SIRIM)
- Look for SIRIM certified plugs on the flexible cords connected to the appliances



- Obtain a duly completed guarantee card with the dealer's/retailer's official stamp and details of the appliance (serial number, etc.)



Example of the Energy Commission and SIRIM Certification Logo for safety

5.2 Some Common Causes of Accidents due to Electricity in The House



Beware friends, accidents involving electricity can KILL.

These accidents in the house may be due to three main factors stated below:

- **Faulty wiring in the house:** This usually occurs when unauthorized extension or rewiring is done by unqualified persons. Some of the usual faults are the omission of earth wires and the reversing of the live and neutral wires. Without an earth wire, the exposed metal parts of appliances may deliver a lethal shock to the user when a fault develops
- **Improper flexible cords:** This can be caused by connecting the flexible cord wrongly to the plug. In the case of appliances which have exposed metallic parts, a 2-core instead of a 3-core flexible cord is used. When the appliance is faulty, the exposed metal parts may conduct electricity and a fatal accident may occur
- **Faulty appliance:** Attempts to repair faults in electrical appliances by people not trained to do so can result in accidental shock



5.3 To prevent such accidents, the following points should be kept in mind:

- All electrical wiring, rewiring or extension work must be carried out by licensed electrical contractors
- Repair of appliances and replacement of flexible cords should be carried out only by competent persons
- DO NOT repair your own electrical appliances. Engage the services of a competent technician
- PREVENT children from meddling with socket outlets. It may cause a terrible accident
- Keep appliances like hair dryers away from water-filled tubs and sinks
- DO NOT touch any electrical appliances when your hands are wet
- DO NOT use multi-way adaptors too extensively. Overloading can cause fire. One socket outlet is for one appliance only
- DO NOT carry out wiring extension by yourself. Engage a licensed wiring contractor for the work
- DO NOT connect any electrical appliance to lighting outlets. A lighting outlet does not have an earth wire to prevent accidents
- ENSURE the switch is in "OFF" position before changing bulbs
- DO NOT nail carelessly on the wall. There may be concealed wiring inside
- USE individual socket outlet for every electrical appliance
- KEEP AWAY from ALL SUBSTATIONS
- TAKE PRECAUTION when working in the vicinity of overhead lines to avoid any unforeseen incident
- DO NOT meddle with any spoilt overhead wire. Report the matter immediately to the nearest TNB Center
- DO NOT climb electric poles. You may get an electric shock or electrocuted



- DO NOT throw anything onto the overhead wires
- NEVER attempt to retrieve anything stuck to overhead lines by whatever means
- DO NOT climb transmission line towers. No one is safe from its high voltage shock
- DO NOT put up any structure close to transmission lines
- DO NOT fly kites close to overhead lines
- NEVER stand on a damp or wet surface when using electrical equipment
- USE a portable electrical tool, which has earth wire
- DO NOT tap electrical power without a proper plug
- DO NOT use any electrical tool which has a damaged casing, cap, switch, lead or plug
- BEFORE using portable electrical appliances and tools, always check for:
 - o Worn or defective insulation
 - o Loose or broken connection
 - o Earth wire connection

**SWITCH!**

SWITCH off when you are not using

SWITCH is energy efficient products

- HOME
- PROGRAMME
- PERIKHATAN
- REPORTS
- PHOTO GALLERY
- VIDEO GALLERY
- TIPS
- MEDIA
- PLEDGE HERE
- CONTACT US
- LINKS

Fun Corner

- Calculate Your Bill
- S&S in Efficiency

Related Links

- KTAJ
- FOMCA
- Sunberpaya
- Tenaga Nasional
- PTM

Website information
 Site Name & general info

Home

NATIONAL ENERGY EFFICIENCY AWARENESS CAMPAIGN

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National Energy Efficiency Awareness Campaign is an effort by Non-Government Organisation (NGO) with the support from government and industries for the benefit of the people and country.

SWITCH!
 SWITCH off when you are not using
 SWITCH to energy efficient products.

Campaign Details

Author: Admin | Last Updated: 25 April 2008

1. Jointly Organised by

- Federation of Malaysian Consumers Associations (FOMCA)
- Ministry of Energy, Green Technology and Water

2. Implementing Agency

Water and Energy Consumer Association of Malaysia (WECAM)

3. With Support

- Energy Commission (EC)
- Tenaga Nasional Berhad (TNB)
- National Energy Centre (Pusat Tenaga Malaysia - PTM)

4. Main Objectives

- To raise the awareness of the Malaysians on the concept of energy conservation.
- To promote the practice of energy efficiency among urban domestic and industrial consumers.
- To improve the usage of energy efficient equipments among domestic and industrial consumers.

Text Size A A A

Members Login

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Latest Updates

The Edge - 27 April 2008 - it's not you, it's the TV!

> if not you, it's the TV!

> if not you, it's the TV!

> National Energy Efficiency Awareness Campaign

RSS Feed

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**NATIONAL ENERGY EFFICIENCY AWARENESS CAMPAIGN (SWITCH!)****Jointly Organised by:**

Federation of Malaysian Consumers Associations (FOMCA)
 Ministry of Energy, Green Technology and Water (KeTTHA)

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