



"Securing Ghana's Energy Future Today"

Why save energy?

Energy cost is one of the major costs incurred by homes and businesses. The more energy consumed, the more the energy cost. For businesses, energy efficiency helps to reduce their running cost thereby enhancing profitability and competitiveness. Just by replacing an inefficient refrigerator that consumes 1200KWh/yr with a more efficient one that consumes just 350KWh/yr will save 850 KWh/yr and reduce energy cost for refrigeration by about GH¢502 annually given an average unit electricity cost of 0.59GH¢/KWh.

At the national / country level, the energy saved through energy efficiency improvements makes it possible for countries to supply more consumers with energy (expand access) using the same energy production capacity thereby, reducing the investment needed for the expansion of the supply infrastructure. The money saved through the avoided investments in additional capacity expansion could be channeled to other critical sectors of the economy such as health and education.

Energy generation and consumption are major contributors of greenhouse gas emissions. Energy efficiency has proven to be one of the effective emission reduction interventions in the energy sector. Energy efficiency can therefore make significant contribution towards national and global efforts to mitigate climate change.

Energy efficiency improvements are low hanging fruits and investments in energy efficiency are recouped through energy and cost savings

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LIGHT BULBS

Help conserve energy.
Turn off lights when
leaving the room.



Change CFLs



to LEDs



- Always buy energy efficient lamps with the yellow label.
- Change to Light Emitting Diode (LED) lamps. They are more efficient, consume less electricity, and last longer than CFLs.
- Remove the starters in fixtures of 'dead' fluorescent lamps to prevent the ballast (choke) from consuming and wasting electricity.
- Switch on security lights as late as possible and switch them off as early as possible
- Make maximum use of natural light.
- Switch off lights in rooms when not needed to save energy.

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WATER HEATERS

Take water heating off
grid by using solar
water heaters.



To save electricity switch from electric water heating to solar water heating where possible



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ELECTRIC IRONS

Ironing cloths in bulk reduces the electricity consumption of irons.



- Electric Irons are rated between 850- 2500 watts.
- To reduce electricity consumption:
 - Do not combine ironing with any other activity as you are likely to spend more time ironing resulting in more electricity consumption.
 - Don't iron in bits and pieces. Ironing should be done in bulk, to save you energy and money as well.
- The efficiency of the iron depends on the user. The more time you spend during ironing, the more energy you consume.



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ELECTRONIC LIGHTING CONTROLS

Photocells and motion sensors are effective energy saving devices for lighting.



Motion Sensor



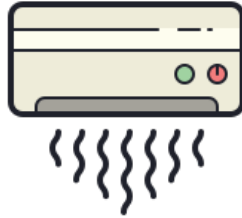
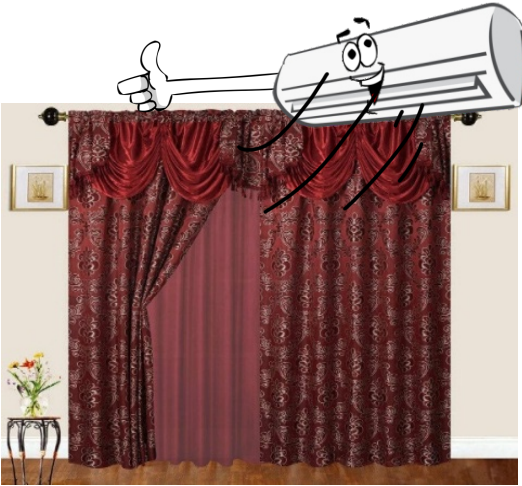
Photocell

- Motion sensors and Photocells can help to reduce your electricity consumption significantly.
- Use motion sensors to turn off lights automatically when not needed.
- For outdoor lighting, use photocells to automatically turn-on the lights at night and turn them off during the day to save energy.

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AIR CONDITIONERS

Air-conditioners are one of the highest electricity consuming appliances in buildings.

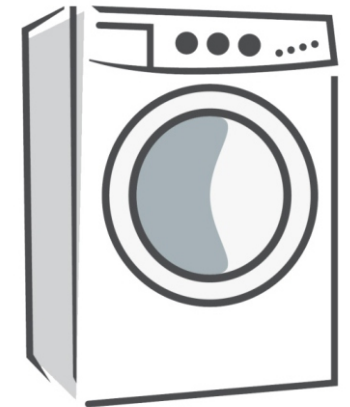


- Buy energy efficient air-conditioners with the yellow label. Look for the more efficient inverter air conditioners which can save between 30 – 40 % of energy.
- Ensure that doors and windows are shut when the air conditioner is switched on.
- Ensure that there are no gaps in doors and windows to prevent hot air from entering the room.
- Ensure that rooms are well curtained to prevent direct sunlight into the room.
- Do not over cool your room to save energy. Room temperatures of 24-26°C are comfortable enough for normal work or relaxation.
- Frequently service your air conditioners to make them work efficiently.
- Always switch off the air conditioner when leaving the room for more than 30 minutes.

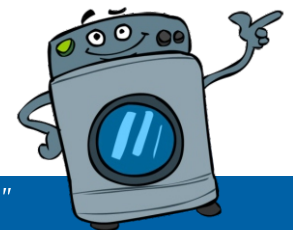
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WASHING MACHINES

Avoid washing in bits and pieces. Always wash in bulk to save electricity.



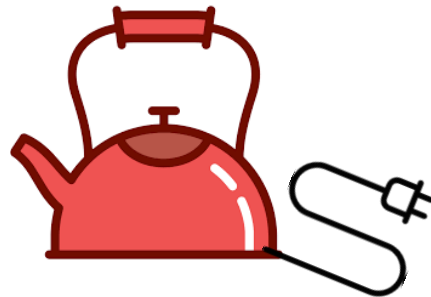
- Avoid washing in bits and pieces. Always wash in bulk to save electricity.
- Wash your clothes with hot water only when necessary since using hot water requires extra energy.
- Avoid using dryers if possible and let your clothes dry off in the sun.



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ELECTRIC KETTLES

The electric kettle is a heating appliance with a power rating of about 1,000 - 2,200 watts and therefore consumes a lot of electricity in a short period of use.



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- Only boil as much water as needed, boiling more water takes more time and wastes energy.
- To avoid frequent boiling of water, store any extra boiled water in a flask for future use.
- Avoid the use of electric kettles to boil water for bathing. Unless it is unavoidable, using a gas stove to boil the water is a cheaper alternative.



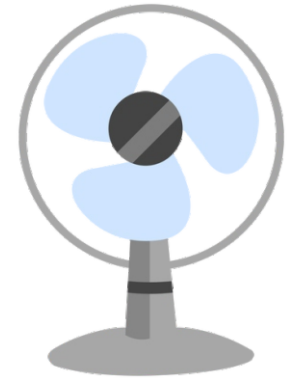
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CEILING/STANDING FANS

Though fans are driven by small motors, they could consume a lot of electricity due to the long hours of Use.



Open windows for easy flow of air into the room



- The work of a fan is to circulate the air in a particular area so that the place will not be too warm.
- Fans are used for long periods and could consume substantial amounts of electricity.
- Circulation of trapped air in closed rooms by fans leads to warming of rooms.
- It is therefore important that the area be well ventilated to enable the fan to function effectively to lower the temperature.

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ENTERTAINMENT GADGETS

The higher the wattage the more energy it consumes.



Most important of all, know the power rating of your electrical appliances and set targets to reduce electricity consumption!

- Appliances on standby mode for long periods can consume substantial amount of electricity.
- To save electricity, avoid leaving your appliances on standby for long periods.
- Mobile phone chargers could also consume energy if left on, even though the phone may not be connected.
- To avoid excessive electricity consumption by these devices, switch off your entertainment gadgets at the wall plug. This can also reduce the risk of fire.
- Avoid switching on several entertainment gadgets at the same time when only one is needed at a time.

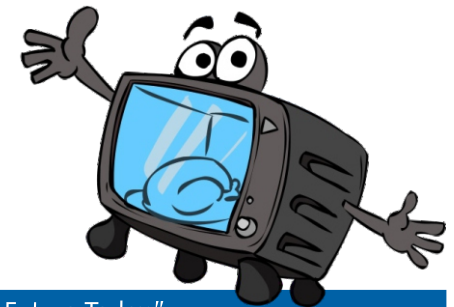
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MICROWAVE

Microwaves are designed specifically for heating water (in food) so the microwave energy heats nothing but water.



- Microwaves are designed specifically for heating water (in food) so the microwave energy heats nothing but water.
- The microwave is best used for heating small amounts of food that contains sufficient water to absorb the microwave energy effectively within a short time.
- Avoid using Microwaves for defrosting foods, it uses extra amount of electricity to defrost frozen meals.
- The most efficient way to defrost frozen meals is to plan your meals and allow the ice time to melt before heating.



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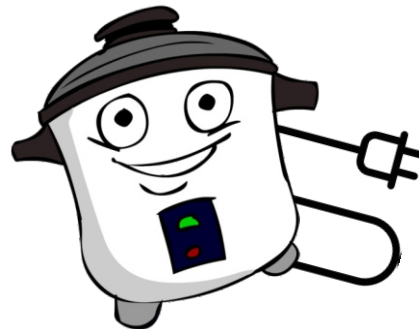
RICE COOKER

The rice cooker is a heating appliance with a power rating of about 800 - 1,500 watts.



- Avoid using an oversized rice cooker.
- An oversized rice cooker will consume more energy than an optimally sized rice cooker.
- Choose the appropriate size of rice cooker fit for the requirements of your family.
- Ensure that the cooker cover is firmly in place to prevent vapour from escaping to reduce cooking time.

- Avoid using the 'Keep Warm' function right away after cooking and switch off at the wall plug to prevent additional electricity consumption.

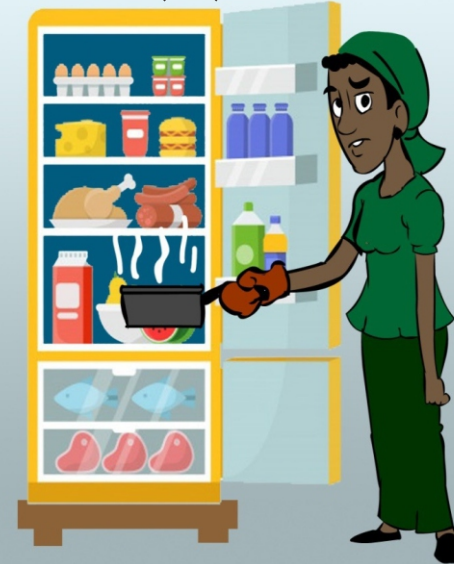


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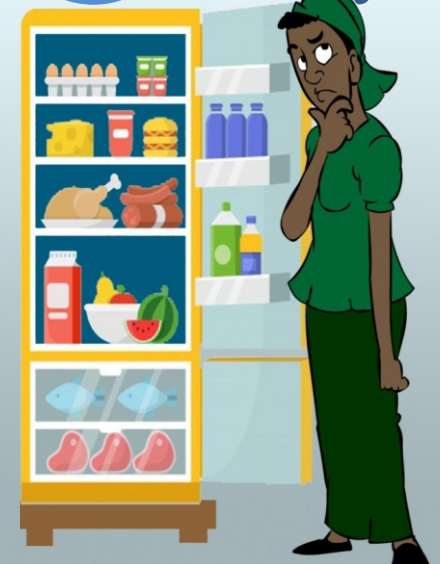
REFRIGERATORS

Fridges run for hours everyday even when you are not at home and therefore consume a lot of energy.

Don't put hot food in the fridge



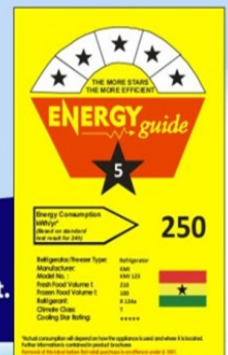
Decide what you want from the fridge before you open it!!



Refrigerator Energy Efficiency Standards & Labels

NO LABEL, NO GOOD!!!

The more black stars  the more efficient.



REFRIGERATORS

Always buy energy efficient refrigerators with the yellow Label.

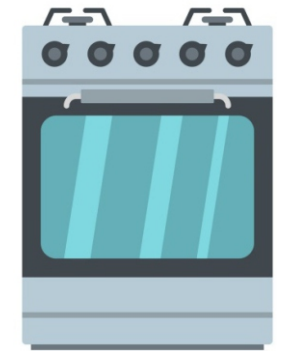


- Always buy energy efficient refrigerators with the Yellow Label.
- Avoid putting refrigerators in cabinets, in direct rays from the sun or near heat sources such as stoves.
- Leave a space between refrigerators and walls to allow air circulation around them.
- Avoid putting hot food in the refrigerators.
- Decide what you want from refrigerators before you open them.
- Defrost refrigerators regularly if they are not frost free.

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ELECTRIC COOKERS

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- The electric cooker is one of the highest electricity consuming appliances.
- Unless it is unavoidable, avoid using the electric cooker. The gas cooker is a cheaper alternative.
- If you must use the electric cooker;
 - Use cooking utensils slightly bigger in diameter than the hot plate to prevent heat escape.
 - Use flat bottom pans for best contact with hot plate.

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