Energy conservation tips:

- Choose an air-conditioner that is suitable for your home. Too large or too small a unit is not efficient and may increase your electricity bill.
- Set your air-conditioner’s thermostat at about 25°C or as comfortably high as possible.
- Close all windows and doors when using your air-conditioner.
- Clean the air filter regularly and have your air-conditioner inspected annually.
- Keep your house cool naturally by using awnings, blinds and solar reflecting film on the windows, where possible.
Generally, when comparing 2 different air-conditioner models of similar capacities, the model with the lower energy consumption is more efficient.

For a quick assessment of the air-conditioner’s energy consumption, look at the number of ticks on the Energy Label. It is an indication of the air-conditioner’s energy efficiency.

The more ticks, the more energy efficient.

You can view the list of air-conditioner models and their energy efficiency ratings at [www.nea.gov.sg/els](http://www.nea.gov.sg/els).

Ticks are a general guide to the appliance’s energy efficiency. For a more accurate estimation of the electricity cost for different models, use the calculation worksheet on page 7.
How To Read The Label

Non-Inverter Type
In standard air-conditioners (non-inverter type), the compressors operate at a constant speed, continually switching on and off to adjust to changes in room temperature.

Inverter Type
Inverter air-conditioners employ electronics that vary the compressor speed to adjust to changes in room temperature. They are usually more energy efficient than conventional air-conditioners.

Energy Consumption
To estimate the energy consumption of an average user, we can assume that the air-conditioner is operating at full load (FL) for about 40% of the time and at part load (PL) for about 60% of the time:

Energy Consumption = [0.4 x FL energy consumption] + [0.6 x PL energy consumption]

For this sample label, the energy consumption = [0.4 x 1.20] + [0.6 x 0.65] = 0.87kWh/h

How is the Energy Consumption Derived?
The non-inverter and inverter type of air-conditioner are tested in accordance to ISO 5151 and JIS C 9612 respectively. The energy consumption is measured under specific laboratory ambient conditions and according to a defined usage pattern, which may differ from your actual conditions. However, it serves as a good estimate of the appliance’s energy consumption.
Estimating Your Annual Electricity Cost

In this example, 2 air-conditioner models, ABC and XYZ, have similar capacities. Model XYZ has 3 ticks while Model ABC has 1 Tick. This means that Model XYZ is more efficient. In fact, you can save about $446 worth of electricity each year, if you choose Model XYZ.

Annual electricity cost ($) = Energy consumption (kWh/h) x No. of hrs used per year (hrs/year) x Electricity tariff ($/kWh)

Estimating Your Annual Electricity Bill Computation Worksheet

When buying an air-conditioner, it is important to compare various models of similar capacities and also consider the energy cost over the lifespan of the appliance.

You can use the worksheet below to compare the electricity cost with the purchase cost of various air-conditioner models of similar capacities over a typical lifespan of 10 years. The more efficient the model, the lower its electricity cost.

Alternatively, you can use the online calculator at www.nea.gov.sg/els.

*In Singapore, the electricity tariff rate is set once every 3 months. For the latest tariff rate, please refer to SP Services website at http://services.spservices.sg.