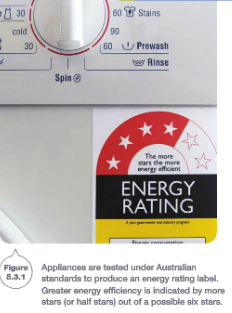
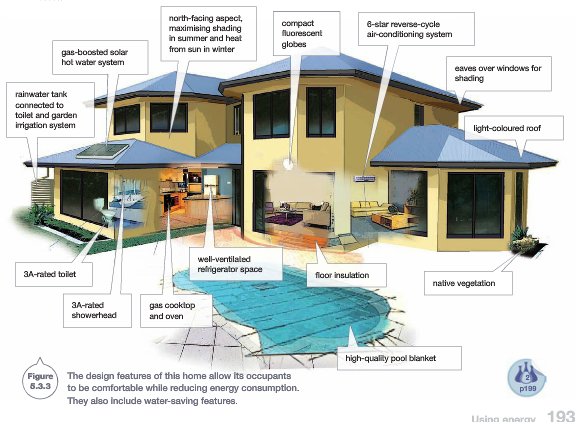
**Reducing Energy Consumption**

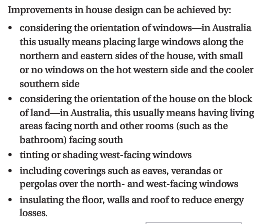
* Most of the energy used to power cars, heat and cool homes, and run electric devices is produced from non-renewable sources such as coal, natural gas and oil.
* Non-renewable energy sources are limited in supply and burning them adds greenhouse gases to the atmosphere which increase the risk of global warming and may cause climate change.
* Ways of reducing energy consumption:

1. Switch off lights, computers and televisions when not in use
2. Walking, cycling or using public transport instead of relying on motor vehicles
3. Replacing highly inefficient incandescent globes with more efficient compact fluorescent globes

**Energy Rating Labels**

Energy efficient appliances save will save on energy usage and reduce   
running costs. Large appliances carry a red and yellow energy rating label,   
as shown in the diagram.

* Energy efficiency is shown by the number of stars. The more stars   
  shaded on the energy rating label, the greater the energy efficiency  
  of the appliance.
* The number on the label provides an estimate of the amount of   
  energy (in kilowatt hours per year) needed to operate the appliance.
* The higher the number, the more energy is needed and the higher  
  the cost to run.

**Efficient Housing**

**Innovative Design**

Some ideas to increase energy efficiency include:

* Regenerative breaking - Kinetic energy as the car slows down is stored in a battery to power the car’s  
   electric motor when needed. Also used to save energy in lifts.
* Interior cooling in parked cars - Solar cells on a car roof powers an interior fan cooling the car when parked.
* Magnetic refrigeration - A new way of cooling using a magnetic field. -
* LED lighting - LED lights are very bright and use very little energy.
* Organic photovoltaics - New generation cheap, flexible solar cells made from carbon-based materials
* Dry washing machines - Currently being developed. Clean clothes using dirt absorbing beads.