

**ALPHEIUS GLOBAL ENTERPRISES**

POSITION ON GLOBAL WARMING

*Issues That Face Us*

# Measuring your Carbon Footprint

## What is it?

The carbon footprint is a measure of the amount of greenhouse gases are produced by our day to day activities, measured in units of carbon dioxide – obviously this measure will be higher, in general, for businesses than for households.

Carbon dioxide is produced during normal activities such as using electricity and natural gas and travelling in cars, trains, planes and other forms of transport. It is everyone’s responsibility to minimise this measurement, by minimising the amount of carbon dioxide emissions we generate each day.

## Reducing our Carbon Footprint

Ways that we can minimise greenhouse gases in the house include buying energy efficient appliances (e.g. whitegoods are marked with their level of efficiency), including water efficiency. Dispose of old appliances wisely – dumping them can cause harmful chemicals leaking into the atmosphere.

Heating a building impacts greatly on greenhouse gas emissions; consider using it less frequently and ensuring that your house contains sufficient insulation.

# Energy and Business

There are a number of strategies that businesses can adopt to work towards reduced energy emissions. For instance, by preparing an Energy Management Policy, you can make your business more energy aware and thereby save energy. Your business can also save energy by concentrating on:

## Air Conditioning

There are two main types of air conditioning systems: evaporative and refrigerative. By improving the efficiency of an air conditioner, you will need less energy to generate the same amount of cooling. That is, the compressor won’t need as much energy to cool the space.

The design of the building is of major concern with respect to the amount of external heat enters the building and therefore how hard the air conditioner will need to work to maintain the set temperature. In poorly designed buildings, some simple ways of reducing this effect includes:

* insulation
* double glazing
* shading
* window tinting or reflective coating
* window coverings (e.g. blinds, shutters etc)

As well gaining heat from outside of the building, objects within the building can also generate heat and you should look to minimise this. Internal heat gain may be induced by:

* lighting
* equipment
* occupants

## High Efficiency Motors

High efficiency motors are those that are efficient energy savers. By replacing standard motors with high efficiency motors, substantial savings can be made. The other benefits that they carry include:

* reduce operating costs
* readily available
* typically quieter and cooler

## Lighting

You can improve the effectiveness of lighting, thereby reducing usage, emissions and costs. Simply remembering to switch lighting off when not required makes adequate savings to start with. Ensuring the proper placement of lighting is also important and installing the correct amount of lighting for the intended task – for instance, lighting over work stations should be more intense than that for a waiting room.

Always try to take advantage of natural lighting where possible to minimise the need for electrical lighting.

## Office Equipment

Office equipment is a major user of energy and includes such things as printers, faxes, computers and photocopiers. In the commercial sector this equipment currently accounts for 7 – 20% of electricity use. Additionally, the heat that these machines create increases the electricity use of the air conditioning systems.

Desktop computers are not very energy efficient and both the CPU and the monitor draws energy – between the two, 90 – 150 watts of energy are drawn, with 600kg of greenhouse gases produced every year from a desktop computer run for 8 hours a day. Laptops are more energy efficient and better designed models are becoming more readily available. Logically, turning off your computer when not in use can go a long way to saving energy.

# Green Energy

## Energy Use in Australia

Per capita, Australia is one of the highest greenhouse gas producers in the world. Australian households generate almost one-fifth of Australia's greenhouse gases through everyday activities such as transport and household energy use.

The average household in Australia contributes to emissions of over 8 tonnes of carbon dioxide each year solely through their energy use. This is because most electricity today comes from generators that burn coal and other fossil fuels.

## Renewable Energy

One way in which we are all able to reduce greenhouse emissions is by utilising renewable energy sources rather than fossil fuels. For instance wind, solar and hydro generation of energy are infinitely cleaner sources and do not involve the destruction of any matter, thereby releasing gases.