Living Smart

creating sustainable communities

Power Smart

Saving energy and greenhouse gases

Saving the environment will also save your pocket!

The energy used in the average house costs approximately $1500 per year in electricity and gas.

What is Energy?

We use energy everyday, when we wash, when we cook, when watching T.V. or listening to music. It gives us light and it gives us warmth, it is what makes our lives comfortable. Yet we hardly give it a second thought. The invisible nature of energy means that we don't realise how much we are using, the impacts of using it or even that we are using it.

Why Conserve Energy?

The traditional sources of energy in WA are coal-derived electricity and gas. They are extracted through mining and drilling and the impacts include habitat destruction, land clearing, soil and land degradation and the depletion of a non-renewable resource. As the products are refined they create greenhouse gases which contribute to climate change. Think about this the next time you use your washing machine, cook your dinner, plug in your hair dryer or watch T.V. While it is not feasible to do without energy all together it is important that we use it efficiently and not carelessly.

Climate Change and Greenhouse

The greenhouse effect is a natural phenomenon that maintains the earth's temperature at a level suitable for life to exist. Human activities over the last 150 years have led to an increase in the concentration of greenhouse gases trapping more heat at the earths' surface. This is called the enhanced greenhouse effect, and is responsible for climate change. Climate change is one of the most significant sustainability issues of today. Climate change has the potential to dramatically change local and global weather patterns, creating widespread social, economic and environmental impacts. Rainfall has already been below average in the south west of WA for the last 28 yrs. No wonder we are experiencing water shortages!!

Every unit of electricity you use produces 1.053 kg of greenhouse gases.

Every unit of natural gas you use produces 0.2 kg of greenhouse gases.

What it means for W.A.

- Average temperature to increase by 1.3˚C by 2030 and 2 to 4.5˚C by 2100.
- Winter rainfall to reduce by 4-8% by 2030 and 10-30% by 2100.
- Increased bushfire risk.
- Cyclones travel and/or form further south and are up to 20% more intense.
- Increased evaporation rates.
- Increased heat stress on cattle and reduced milk production from dairy cattle.
- Extinction of 3 frog and 15 mammal species with just a 0.5˚C temperature rise.
- Extinction of 119 Dryandra and Acacia species with a 2˚C rise.

Why must we act now?

- The average global surface temperature in 2003 was the ~~third~~ warmest year (~~after record years 1998 and 2002~~) since records begun in 1861.
- The arctic ice area reached a record low in 2002 and again in 2003. A report released in November 2004 identified the Artic is now experiencing “some of the most rapid and severe climate change on earth”, at twice the rate of the rest of the world.
- Just stabilizing the concentration of greenhouse gases in the atmosphere will require a 60-70% global reduction in greenhouse emissions.
- Australia has the highest emissions per person in the industrialised world, 35% more than the U.S.
- Since 1990 the average per capita emissions for industrialised countries has been consistently falling. Australia has increased its emissions each year since 1994.

Research shows that at least 20% of the energy consumed in the home is directly related to behavioural choices.

Greenhouse gases and your home

Every unit of electricity you use produces 1.053 kg of greenhouse gases. Every unit of natural gas you use produces 0.2 kg of greenhouse gases. This means that;

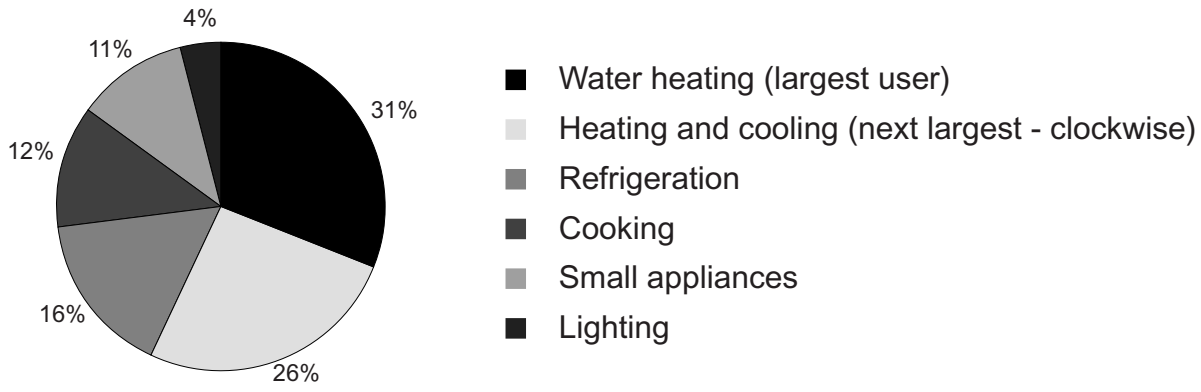
Greenhouse gas emissions are not just the product of industry. Australian households produce a fifth of greenhouse gas emissions.

- a medium sized 3 star fridge will produce 624 kg of greenhouse gases a year,
- a top loading washing machine will produce over 648 kg of greenhouse gases a year, and
- a large electric bar heater will produce 1 kg of greenhouse gases every hour it is used.

If you want to make the most impact on your energy bills, then you need to target water heating and house heating and cooling. As you can see from the chart below these are the big energy guzzlers.

(SEDO, 2001)

Energy consumption in the home



Your Choices will Make a Difference

While the amount of energy your house uses does depend on how many people you have in your home and the structural characteristics of your home (i.e. insulation, orientation), a significant amount also depends on the behavioural choices you make in your home. Simple behavioural changes will make a difference to your energy consumption, the amount of greenhouse gases you produce and your energy bills. Here are some examples.

- A 2.5 star reverse cycle air conditioner will produce 2 kg of CO_2 every hour it is used. A ceiling fan will produce 0.009 kg of CO_2 every hour it is used.

You can make a choice between turning the fan or the airconditioner on!

- Just turning the switch to cold water on your washing machine will save 80% of the energy used to do a warm wash. And will save 567 kg of greenhouse gases every year.
- Turning your television, video, microwave and stereos off at the power point can save up to 12% off your energy bill.

See below for other great ideas on reducing energy.

Power Smart House

Bathroom

- Take shorter showers by turning the taps off when 'sudding' up with soap.
- Take cold showers in the summer, they increase blood circulation and can be very invigorating! If this doesn't appeal, at least try having warm showers instead of very hot ones. Hot water dries out your skin and your hair. Tepid water is best for a healthy complexion.
- Install a AAA-rated showerhead and save up to $100 off your energy and water bills every year (for electric storage hot water systems).
- Avoid leaving ventilation fans on in the kitchen, bathroom or other areas they can suck out an entire house full of heated or cooled air in about 1 hour. Note: Bathroom fans are more effective in preventing mould during the shower than after.

Power Smart Tip!

To find out if you have any draughts, take a stick of lighted incense and move it around doors and windows and watch where the smoke blows.

Draught excluders, weather stripping or something as simple as a door snake can be used to prevent unwanted airflows.

Living Areas

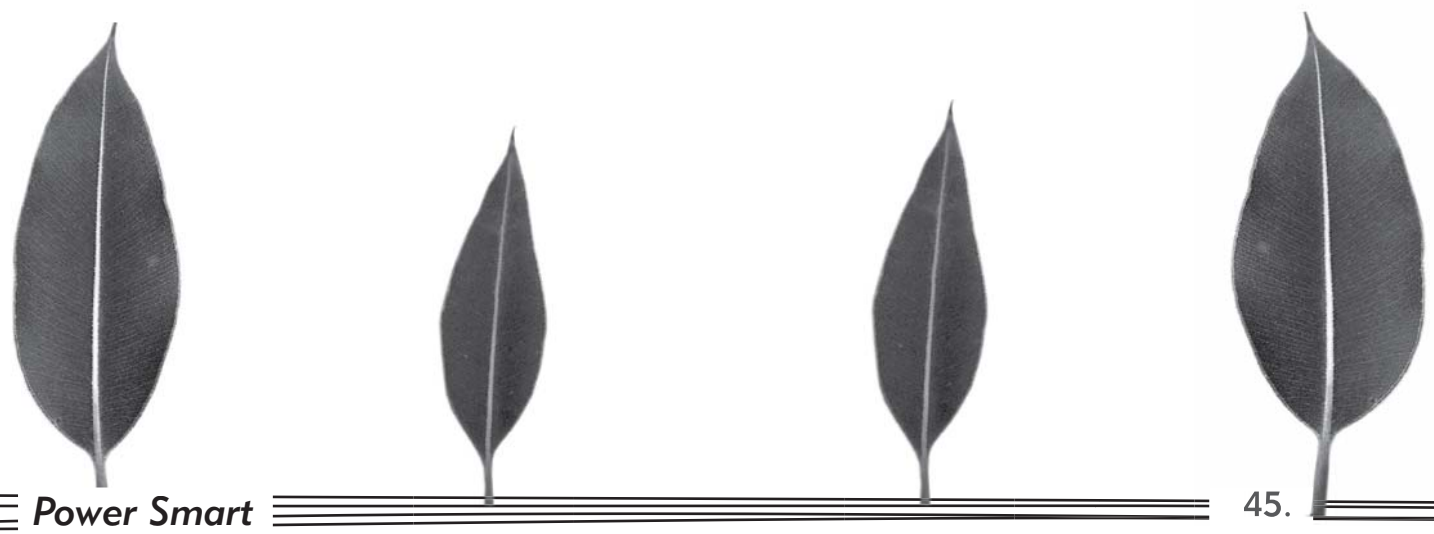
It is important to be comfortable in our home. Here are some steps for the different seasons to keep your home at a comfortable temperature.

In Summer

- Close blinds and curtains during the day to prevent heat entering.
- Make use of natural ventilation by opening windows once it is cooler outside than inside.
- Use fans (instead of air conditioners) to create cooling breezes.
- Put off jobs that produce heat or steam, such as cooking, washing or ironing, until cooler times of the day.
- Close all doors around the area you are cooling and keep the area to a minimum.
- Clean air conditioner filters regularly and keep external air conditioners shaded.
- Turn off cooling systems overnight or when you are out.
- On hot days, cook outside on a gas bbq or solar oven or create a meal that doesn't require any cooking.

In Winter

- Open blinds and curtains during the day to let the free heat of the sun in - up to 3 kWh of heat per square metre of window can be let in per day, which is equivalent to a single bar radiator running for 3 hours.
- Close curtains and blinds at night to keep the heat in - curtains with fitted pelmets are the most effective for this purpose.
- Wear warm clothes or snuggle up under a blanket.
- Keep heaters clean for maximum performance - keep reflectors shiny and dust free and clean air filters frequently.
- Turn off heating appliances overnight or when you are out.
- Use ceiling fans to circulate warm air - reversible ceiling fans are best, as they can circulate warm air without passing a breeze over your skin.



Laundry

Clothes Washing

- Wash your clothes in cold water. It cleans just as well and saves 80% of the energy used in hot washes. (Except dirt nappies and soiled sheets – use a hot wash for health reasons)
- Only use the washing machine for full loads.
- Use the shortest washing cycle where possible, separating heavily soiled from lightly soiled clothes.
- Repair leaking hot water taps.

> ***Power Smart Tip!***
>
> To make it easier to turn appliances off at the power point you may want to use power boards so you can turn individual appliances off or you may need a short extension cord to make the plug easier to reach. You may even want to put signs up to remind other people.

Clothes Drying

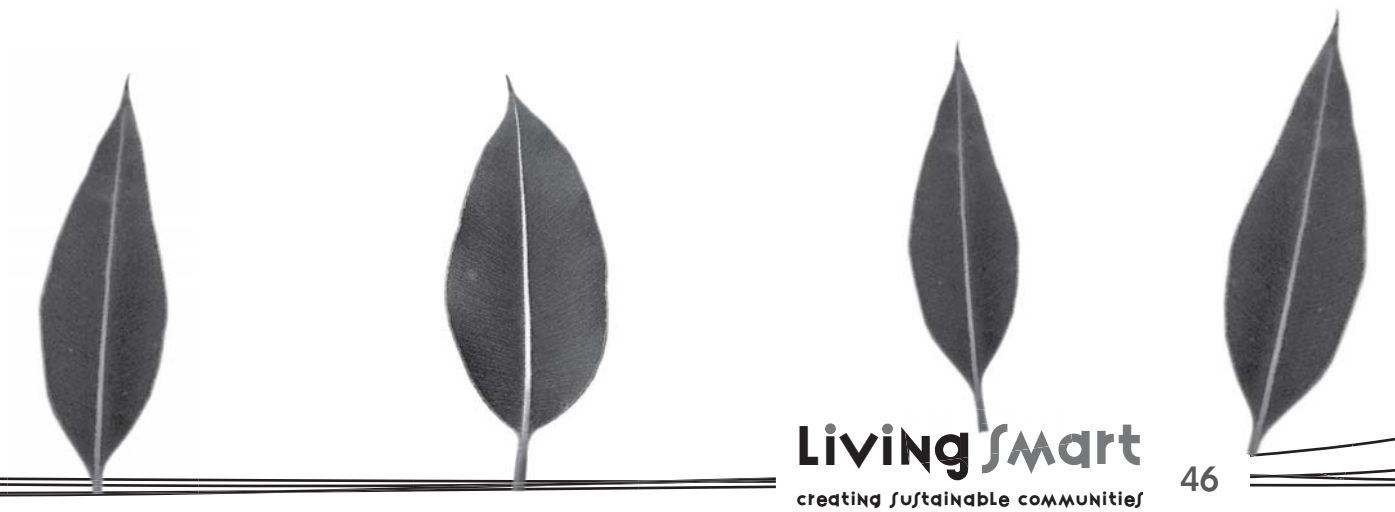
- Use the suns natural, free energy to dry your clothes rather than an electric dryer.

If you HAVE to use a dryer -

- Dry heavy items separately from light ones.
- Clean the lint filter in the dryer after every load.
- Use the correct temperature setting for the type of clothes.
- Avoid over loading or over drying.
- Remove as much excess water from clothes as possible before drying.

Ironing

- Avoid using the iron to dry clothes.
- Use the lowest setting where possible and minimise the time left idle.
- Do you really need to iron large items such as sheets? If hung out to dry they should not require ironing.



Kitchen

Cooking

- Use a microwave or gas burner as it uses less than a quarter of the energy as an electric stove and half of a conventional oven.
- Make sure the oven seal is in good condition and the heat does not leak out.
- When using the oven, try to cook several dishes at once and avoid opening the door whilst cooking.
- Use cooking pots with a flat base and tight sealing lids. Using lids will speed the heating process. Match the size of the cooking pots to the size of the element.
- Electric hot plates retain their heat even after you switch them off, so turn the element off before you finish cooking.
- Keep preheating times to a minimum.
- Many appliances we use in the kitchen are electrically operated, why not use a normal can opener instead of an electric one, hand beaters instead of electric beaters. This also gives your muscles a bit of a workout!

Refrigeration

- Do not overload the fridge - leave space for circulation.
- If you have a second fridge or freezer, do you really need it all year round?
- Ensure your fridge is cycling on/off.
- Is the rubber seal on the door intact? Have a look and then test it by closing the door on a sheet of thin card. If the card slips out then its time to get a new seal.
- Defrost the freezer when the ice is more than 5mm thick.
- Remove all dust from the fridge condenser coil to improve efficiency.
- Let frozen foods thaw in the fridge – by making your fridge cooler, it won't have to work as hard. Similarly, do not put hot foods in your fridge.
- Turn your fridge off when you go on holiday.

Are you power smart?

Every couple of months we receive our electricity and gas bills. These are an important source of information, telling you just how much you are using, how it compares to your last bill and how it compares to the same time last year.

These bills can help you keep track of how power smart your home is.

Dishwashing

- If dishwashing by hand, rinse dishes in cold water, rather than hot.
- Save up your dishes for a large wash rather than multiple small washes.
- Load the dishwasher to capacity before running it and use a cold water connection for washing.
- Use economy cycles where possible. Try the low heat, low water options.
- Clean the filter after each wash.

Lighting

- Install efficient fluorescent lighting in high use areas of the home. Energy efficient compact fluorescent globes use up to 80% less electricity than normal incandescent bulbs and can last 8 times longer.
- Use low watt bulbs where possible. If stronger light is needed for reading or desk work, use a lamp.
- Turn lights off when not needed, make the most of the daylight.
- Create a romantic atmosphere and use subtle lighting!

Buying Energy Efficient Appliances

When you are buying a new appliance for your home make sure you check its energy rating. The greater the number of stars the appliance has the more energy efficient it is, which means less greenhouse gases and lower running costs for you.

That's a saving of $78 a year and 537.6 kg of CO2. Imagine how much it can save you over the life of the fridge!

Eg. A comparison of two fridges

Star Rating	Annual Energy Consumption	Annual Running cost	Annual CO produced
****	*810 kWh*	*$113*	*777.6 kg*
**	*1370 kWh*	*$191*	*1315.2 kg*

In 1997-98, only 6% of the energy consumed in Australia came from renewable sources.

With our plentiful sources of sun and wind, there is a large potential for this to be considerably increased.

Meet your Water Heater

We have already identified that heating water is one of the main guzzlers of energy in the home. Below are some minor adjustments that you can make to your hot water system to make it more efficient.

Adjust your Thermostat

Turning your thermostat down by a few degrees can make a big difference to your energy bills. But will make little difference in the shower as the water is usually too hot anyway and we have to add lots of cold water to cool it down. Remember to turn the hot water system off when you go on extended holiday.

Step 1 - Take a look at your water heater – it may be a storage tank or box mounted instantaneous unit on your outside wall.

Step 2 - Look for the thermostat – this may be a lever or pushbutton display. If it is an electric thermostat behind a panel you will need an electrician to adjust it.

Step 3 - Check the current temperature setting. Factory settings are often high – equivalent to 70 degrees Celsius which can scald!

Step 4 - Turn down the thermostat to 60 °C on storage hot water systems and 40 - 50 °C on instantaneous systems or the lowest point of the range.

Protect your pipes

Insulate the outdoor water pipes from your electric hot water system.

Step 1 - Identify the hot water pipe leaving your water heater. TAKE CARE: this will be hot when water is being used.

Step 2 - Purchase at least 50cm of foam pipe insulation from your local hardware store.

Step 3 - Wrap the foam around the exposed parts of the pipe (especially close to the storage tank) to insulate it and reduce heat leakage from the pipe and storage tank.

Step 4 – Tape up as needed to hold foam in place with split on the downward side.

Your Energy Source does make a Difference

Electricity & Gas - In Australia in 2000, 84% of our electricity came from burning coal, making us one of the top coal-burning countries in the world. The production of electricity from coal emits considerable greenhouse gases. Twenty-four coal power stations are the largest source of greenhouse emissions in Australia, pumping out “170 million tonnes of carbon dioxide every year – a figure four times the annual emissions of cars on our roads annually”. Natural gas produces about one fifth of the amount of greenhouse gases that electricity does. Having gas connected for your cooking and hot water system will not only save a large amount of greenhouse gases but will also save you money as natural gas costs less than half of what electricity costs.

Renewable Energy - The environmentally friendly alternative to electricity or gas are renewable energy sources, which utilise solar, wind or biomass energy and do not contribute additional greenhouse gases or are greenhouse neutral in the case of sustainably harvested biomass. There are a few ways to take up renewable power as one of your power sources.

a) Home power generation

Solar is the more common renewable power source in cities like Perth. It comes in the form of solar hot water systems that use the energy of the sun to heat our water, and roof-mounted photovoltaic (solar electric cells) panels which produce electricity for our household electric appliances. These power sources have minimal running costs after the initial installation. The initial cost can be significant so remember there are attractive rebates available from Sustainable Energy Development Office.

Wood - Woodheaters are a popular method of heating homes but are the largest contributor to haze in winter months. Operate your wood heater so as to minimise the amount of smoke it produces. Check on where your timber is coming from and never burn wet, green wood as it generates little heat (50% less than dry wood) and creates excessive smoke. Never burn household rubbish or wood that has been chemically treated as this can produce toxic gases. If you decide to buy a wood heater make sure you buy one meeting Australian Standards, do not buy a heater that is too large for the room and with a flue extending at least a metre above your roofline.

b) Purchase of renewable energy via the Green Power scheme offered by Western Power under the name NaturalPower. Natural Power means you pay a little bit more for your electricity to have energy from renewable sources put into the grid, contact Western Power for more info. Buy supporting NaturalPower you support new renewable energy projects such as the Albany Wind Farm.

TOP 5 TIPS for living power smart!

- Turn down the thermostat setting and insulate the pipes on your hot water system.
- Minimise the amount you heat and cool your home (take preventative measures).
- Turn off all standby power.
- Purchase renewable energy for your household.
- Wash your clothes in cold water.

Want to find out more?

Books

Australian Greenhouse Office (2002) Living with Climate Change: An overview of potential climate change impacts in Australia. Can be downloaded from www.greenhouse.gov.au/science/publications

CSIRO(2001) Climate Change Projections for Australia. Can be downloaded from www.dar.csiro.au/publications/projections2001.pdf

Energy Strategies (2004) A Clean Energy Future for Australia www.wwf.org.au/News_and_information/Publications?PDF/Report/clean_energy_future_summary.pdf

Hoffman,P. (2002) Tomorrows Energy: Hydrogen, Fuel Cells and a prospect for a cleaner planet. MIT Press, London.

Mobbs,M. (1998) Sustainable House: Living for our future. Choice Books, Australia.

Scherr,H. (2004) The Solar Economy: Renewable Energy for a Sustainable Global Future. Earthscan, London.

Magazines

Alternative Technology Association. ReNew: Technology for a Sustainable Future. www.ata.org.au

Websites

World Wildlife Fund – Climate Change campaign

www.wwwf.org.au/About_WWF_Australia/How_we_work/Campaigns/Climate_change/facts

ClimateArk – Climate Change Portal

www.climateark.or/news/

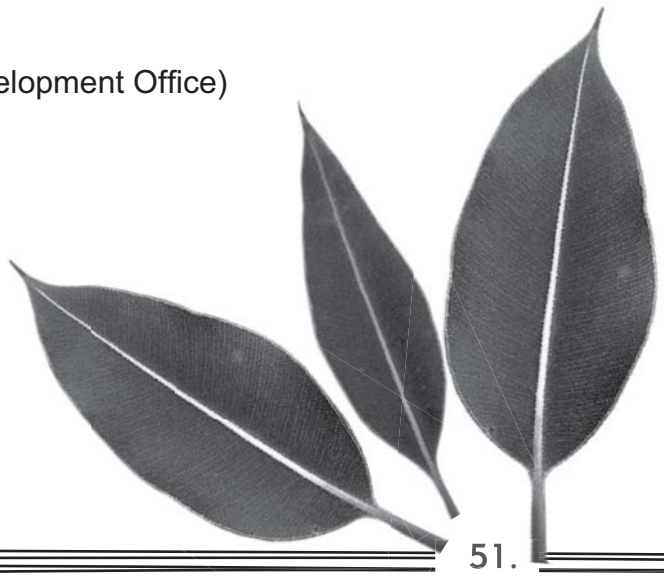
On the below websites you can find interesting tips and information on how to reduce your energy consumption. Alternatively you can contact these organisations and they can send the information out to you.

www.sedo.energy.wa.gov.au (Sustainable Energy Development Office)

www.westernpower.com.au (Western Power)

www.greenhouse.gov.au/your home (Australian Greenhouse Office)

www.greenhouse.gov.au/community_household.html



Living Smart

creating sustainable communities

Move Smart

Environmentally friendly travel

Why you should start Moving Smarter

You should consider the impact that car use has on your wellbeing.

Driving can be stressful, frustrating and tiring. Increasing car use also means we are getting less and less exercise.

- Car use contributes over half of the emissions that produce photochemical smog in Perth.
- Cars contribute to traffic congestion and noise pollution making a less pleasant environment to be in.
- Cars are expensive to run. Think of all the money you pay in petrol, servicing, repairs, licensing and insurance.
- Road accidents are a major killer and cause of disabilities.
- Many of us are becoming less healthy because we no longer use our legs to get around, instead we spend up to two hours a day just sitting while travelling to and from work.

Did You Know??

- If existing trends continue, the number of cars in Perth is set to double to 1.3 million within the next 30 years and both congestion and journey times will increase significantly.
- One third of all car trips in Perth are for journeys of 3km or less, you could walk this in around half an hour.
- Perth has one of the highest car use rates of any city in the world, and that rate is increasing.
- There are over 65,000 car parking bays in Perth which cover 133 hectares of land, or the equivalent of 57 Subiaco Football Ovals.
- In 1999, air pollution from cars causes 300,000 extra cases of bronchitis in children, 15,000 hospital admissions for heart disease and 162,000 asthma attacks in children in Austria, France and Switzerland. In Australia we have a higher use of cars per capita and a lower standard of fuel. Is your car damaging your health?

Alternatives to the Car

There are three main alternatives to the car.

Public transport – catch the bus, train or ferry.

Perth has a fairly comprehensive public transport system. Visit Transperth's website (www.transperth.wa.gov.au) or call 136213 to find out what services are available in your area. You may be surprised at how easy it is to catch public transport.

> ***Remember***
>
> Every litre of petrol you save will reduce greenhouse emissions by 2.5kg.
>
> Just changing a few trips a week will quickly add up.

The journey planner on the Transperth website allows you to enter details of your journey – where you are travelling to and from, at what time and on what day – and will then calculate for you all possible travel options using Transperth services. The information is provided as a range of options in an easy to read format and also provides details such as the distance needed to be walked and an approximate time for the total journey (including time spent walking or waiting between different services).

Cycle or Walk

Many car trips are short trips, half are less than 5km (= 20 min cycle) and many are less than 1km (= 12 min walk). Comprehensive bike maps are available for the whole of the Perth metropolitan area which will allow you to plan the best route to get you from A to B. Get a copy from your local bike shop.

Car pooling

Car pooling can make a difference, the more people in the car the greater the savings and the less pollution produced. For a daily 40 km return car trip to work, car pooling with just one passenger can save motorists between $600 and $900 a year depending on the size of the car. It is also a great way to get to know your neighbours or your work colleagues.

Benefits of alternative forms of transport

Health

A minimum of 30 minutes of moderate exercise on most days of the week can help you stay healthy. Regular activity will help prevent heart disease, strokes, diabetes and some cancers. It will also help you lose weight, help keep you young, is better for your mental health and will stimulate your immune system. Incorporate walking or cycling into your travel each week and stay healthier.

Did you know that in 2003, 180 people were killed and 2837 people were seriously injured as a result of road crashes on WA roads. Public transport is the safest way of getting around Perth. No Transperth or Westrail passengers have been killed while using public transport and there is significantly more violence on the road compared to public transport.

Save Money

Of all the Australian cities Perth has the highest transport costs per capita, with the average household spending over $100 a week. It is much cheaper to catch public transport, and can cost as little as $15 a week for daily travel to work. Alternatively invest in a bike, after the initial outlay it will cost you nothing to ride to work or the shops each day.

Saving Time

In our busy lives we often find it hard to find the time to exercise. By making exercise part of our journey to work, the shops or a friend's house we are being smart both with our time and our health. Time on public transport is productive time that you can use to read a book, write a letter, relax, set some goals, meet a new friend or plan your day. This is much better for you than having a frustrating drive to work, which can leave you tense and agitated. Instead you will arrive at work positive and ready for the day especially if you have incorporated some walking in the journey. It is rare for public transport to get caught in a traffic jam, even at 8.30 in the morning.

Environment

The average Australian car dumps about 4.3 tonnes of carbon dioxide into the atmosphere every year. Transport accounts for over 14% of Australia's greenhouse gas emissions and is therefore a significant contributor to global climate change. Every litre of petrol you save will reduce greenhouse emissions by 2.5kg.

At the Perth regional level vehicle emissions are the largest source of photochemical smog and the second largest contributor to haze (fine particle emissions) which are bad not only for us but for the natural environment as well. At a local level, harmful vehicle emissions include carbon monoxide, nitrogen oxide and volatile organic compounds, including benzene which is known to cause cancer. You inhale even more of these emissions when you are stuck in your car in a traffic jam than if you were walking alongside the freeway.

Look out for biodiesel.

Biodiesel is a diesel derived from a renewable source such as plant or waste products. Because it uses fuel grown on farms it is sustainable and does not contribute to greenhouse gases. It is also a cleaner fuel and produces less toxic air pollution than diesel.

You can make a difference

Changing the type of transport you use for just a couple of your trips a week can make a difference. If it is not possible to change your journey to work consider walking to the local shops to buy milk and bread instead of driving to the supermarket. Walk your kids to school rather than driving them or walk to a friend's house. It may take a little longer but gives everyone their exercise.

All you need to do is change any two trips a week to a smarter alternative and you will make a difference not only to the environment but also to your health.

If you are using a car

Use your car efficiently as every litre of petrol saved reduces greenhouse emissions by 2.5 kg and saves over a dollar.

- Do this by driving smoothly and avoiding stop start traffic. Accelerating hard and braking hard not only creates wear on your car, it also creates more pollution and uses more petrol.
- Keep your car well maintained and regularly serviced.
- Keeping the car tuned will save up to 5% on fuel costs and up to 15% of greenhouse gases. Keeping the tyres inflated will also save up to 5% on fuel costs and will extend the life of the tyres.
- Plan your trips - Rather than making multiple trips a day run all your errands at once. For example, go to the bank and do your shopping on the way to picking the kids up from school.
- Avoid using your air-conditioner, this can increase fuel consumption 5-10%. Park in the shade, use sun shades and open the windows for natural cooling. If you must use the air-conditioner make sure you let the hot air escape by winding down the windows. Once the hot air escapes close the windows and then use the airconditioner in economy mode.
- Avoid using the roof rack, this will create wind resistance and lower your fuel efficiency. Put things in the boot instead.
- Join a vehicle greenhouse abatement program like Carbon Nuetral (www.carbonnuetral .com.au) or Green Fleet (www.greenfleet.com.au). they will plant and maintain the trees to soak up your greenhouse emissions each year.
- Consider fuel alternatives as they become available, such as biodiesel for diesel vehicles and converting to LPG as a fuel with lower greenhouse gases.

What about Aeroplane Travel?

A simple rule of thumb to remember is that a plane uses about as much fuel and therefore produces as much CO2 as would every passenger driving one car the same distance. So while you may not travel frequently by plane it does create an enormous amount of greenhouse gases. International travel has now become a common luxury of the western world. Next time you go on holiday consider not going as far. Travelling closer to home will decrease the impact of your travel and will help support your local economy.

TOP 5 TIPS for living move smart!

- Replace as many car trips as possible with public transport.
- Replace a short car trip with cycling or walking when you can.
- When replacing your car buy a more fuel efficient one or become a single car family.
- Work from home if you can, saving fuel and wear on your car.
- Take your next holiday closer to home.

Want to find out more?

Books

Australian Bureau of Statistics (1997) Australian Transport and the Environment. ABS Downloadable from www.abs.gov.au

Ha, T. (2003) Greeniology: How to live well, be green and make a difference. Allen & Unwin, Sydney.

Newman,P.W.G. (1992) Winning back the Cities. Pluto Press, NSW.

Websites

Visit the website of the Sustainable Transport Coalition of WA, where you can find regular newsletters, articles, research and submissions on current transport issues that are affecting Western Australia. www.stcwa.org.au

For cyclists visit the Bicycle Transportation Alliance of WA, here you will find loads of cycling information, maps, tips on insurance and safety as well as current promotions and events. www.multiline.com.au/~bta

Cyclists can also get information and download maps, guides, brochures and technical publications from the Department of Planning and Infrastructures cycling website. www.dpi.wa.gov.au/cycling

If you would like to find out about the state government initiative TravelSmart visit www.dpi.wa.gov.au/travelsmart. Here you can find out what initiatives for alternative transport are taking place in the school, community and workplace.

Health Smart You

Looking after yourself as well as the environment

The health of you and your family is just as important as the health of the environment. In Health Smart You we will show you how to improve the health of your family while improving the health of the environment. So everybody wins!!

EATING FOR SUSTAINABILITY AND HEALTH

Follow these guidelines for eating smart and start experiencing the benefits.

1) Eat organic food

Better for you – organic food hasn't been subjected to toxic synthetic chemicals, pesticides and fertilisers, which have been linked to birth defects and cancer. It is also said that organic food tastes better and is more nutritious – with more vitamins, minerals and antioxidants. A number of studies have now shown organic food to have up to 100% higher antioxidants.

More equitable - While organic foods may be more expensive than conventional foods, conventional food prices do not reflect the hidden costs associated with their production such as pesticide regulation and testing, hazardous waste disposal and cleanup, damage to the environment and costs to the medical system.

Better for the environment – organic food production is less intensive, uses traditional methods, has less impact on the environment, protects the soil and water quality, doesn't use toxic synthetic chemicals and supports small farmers. Organic food production is based around a philosophy of protecting the environment.

How local should you be?

The answer is the closer the better. Your local community is better than West Australian, which is better than Australian, which is better than overseas. Of course your own garden is best of all – grow a few vegies and taste the difference.

2) Eat local and seasonal food

This will help to support your local economy rather than supporting big international companies.

This will conserve energy as transporting foods across long distances consumes more energy for fuel and refrigeration than locally produced food.

Cheap foods that have come from far away are likely to be cheap because labour costs are so low that those that grow it can hardly afford to buy food for themselves.

The further the food has travelled and the longer it is stored the less nutritious it is likely to be. Some of the B. vitamins and vitamin C break down very quickly. So buy West Australian fruit and vegies, not Californian ones!

Many countries which we import food from have less pesticide controls than in Australia and are likely to have more residues and some of these countries still use organochlorine pesticides like DDT. For example, Chinese peanuts have many times the level of cadmium (a toxic heavy metal) than Australian ones.

3) Eat more fruit and vegetables

Most people choose to eat a wide range of animal products such as beef, pork, chicken, fish, milk, cheese and eggs. This animal-based diet has a profound impact on human health and on the environment at large.

The best foods to eat are vegetables (especially the dark green ones). Increased consumption of vegetables is associated with less chance of cancer, heart attack, stroke, diabetes, alzheimers, arthritis and other diseases and is associated with living longer. Just one extra serve of vegetables a day can reduce your risk of cancer by up to 20% and stroke and heart attacks by 15%.

Heavily meat based diets can lead to higher rates of diabetes, obesity, high blood pressure, heart disease and cancer. This is because animal products are very high in fat and low in fibre. Vegetables and fruits are an important source of vitamins such as magnesium and potassium which are low in meat products.

Modern meat production involves intensive use of grain, water, energy and grazing areas. There are three times more livestock than human beings on the earth! These animals require land to live on and land for their feed to grow on. This often requires clearing of vegetation resulting in degradation, salinity and biodiversity loss. Animal agriculture produces large amounts of air and water pollution including methane gas.

Many people today have chosen to become vegetarians or even vegans (no animal products at all). This is not necessarily a step that everybody is able or willing to take. However even just changing a couple of meat-based meals a week to vegetarian meals will make a difference.

Did you know?

Free range eggs have much higher levels of Omega 3 oils (good oils) and minerals than battery raised eggs. They may cost more but you get more nutrition per egg.

4) Eat whole foods with adequate fibre

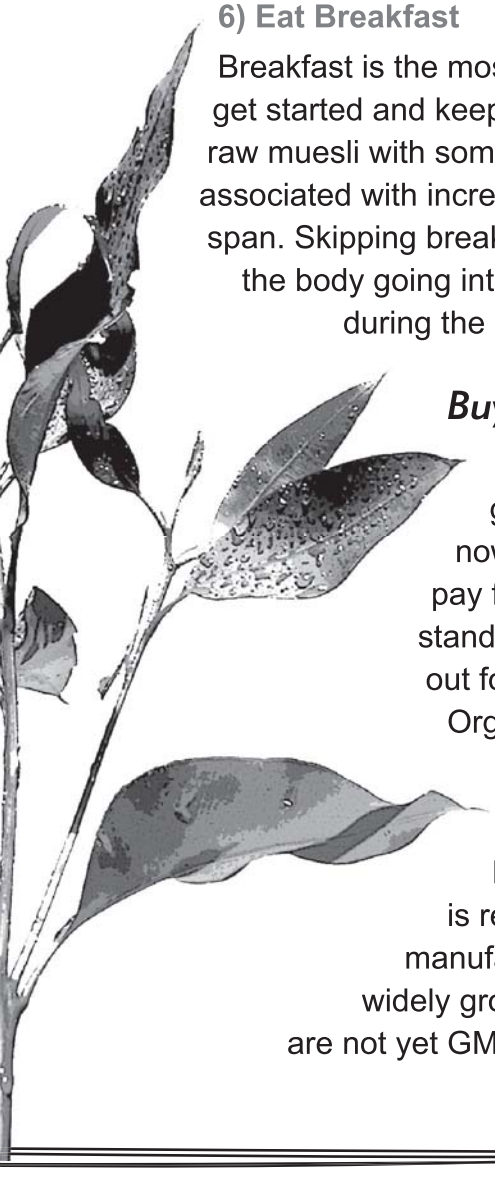
Whole foods including fruits, vegetables, unrefined grains, nuts and seeds are the most healthy foods we can eat because they contain complex carbohydrates, fibre and a host of other nutrients. A lot of the food we eat (especially white flour) is refined which in the process loses a lot of its most valuable nutrients including fibre and vitamins, A, B, E and minerals such as zinc. These are essential for our health reducing the risk of heart disease and cancer.

5) Avoid processed food

By avoiding processed foods you will avoid excessive amounts of sugar, fat and salt, which are not good for you. You will also be avoiding possibly harmful chemicals and additives. Many additives are perfectly harmless but some may be of concern, particularly for children. Some to look out for are sulfiting agents, MSG, sodium nitrate, BHT (butylated hydroxyanisole) and BHA (butylated hydroxytoluene). Artificial food colourings such as 102, 110, 127, are linked with attention deficit disorder in children and are known to deplete essential B vitamins. The general rule is the more additives in food (i.e. the longer the list) the less food there is.

6) Eat Breakfast

Breakfast is the most important meal of the day, providing you with the energy to get started and keep going. Avoid processed, sugary cereals and instead eat oats or raw muesli with some crushed linseed and fruit on top. Regularly missing breakfast is associated with increased weight gain, decreased intellectual ability and a shorter life span. Skipping breakfast during the day is associated with increasing food desires and the body going into starvation mode. As a result people who skip breakfast eat more during the day and it goes on as fat.



Buying your foods

Good sources for buying food for your green diet include local growers markets, health food stores and some supermarkets which now sell varieties of organic foods. To be sure your getting what you pay for buy organic food that is certified. Unfortunately there is not one standard certification system for organic food in Australia. Some to look out for include; ORGAA, NASAA, Biological Farmers of Australia, The Organic Herb Growers and the Organic Food Chain.

GM foods now need to be labelled so if you are worried about GM foods check the ingredients and it will tell you if there has been anything genetically modified. However if the DNA or protein is removed during processing (i.e. an oil made from modified corn) manufacturers don't need to provide a label. Soya products are the most widely grown GM food so check those first. Australian made soya products are not yet GM, another good reason to buy Australian.

Watch out for GM Foods

Genetically modified foods come from crops and other food sources that have had their DNA modified by gene technology. This means that genes can be transferred to give organisms new characteristics. For example, you can take a gene from a fish that lives in very cold seas and insert it into strawberry DNA so it can survive the frost. Genetic modification or engineering is a complex issue, involving human health, the environment, ethics and the future food needs of the world's population.

Soft is bad!

A recent study by Dr Dingle found that many soft drinks had more than 10 per cent sugar, up to seven added flavours and pH levels as low as 2.5.

This is highly acidic - the body naturally had a pH level of about 7.2.

Some potential benefits and disadvantages of GM foods are listed below.

FOR	AGAINST
Improve nature – increase nutritional value, aesthetic appeal, shelf life of foods. Feeding a hungry world – modified crops to resist pest attack, drought etc could create less wastage, greater yields, lower cost food. Environmental – crops modified to resist pests and disease could reduce need for chemical sprays. Medical benefits – foods could be modified to provide edible vaccines.	Health concerns – new allergens can be created inadvertently. One marker gene used is resistant to antibiotics, if this enters the food chain it can reduce the effectiveness of antibiotics. Ethical concerns – using genes from animals in plant foods poses ethical, philosophical and religious problems for many people. Environmental concerns – increased resistance to crops can create superweeds or resistant insects. Can have unknown implications for biodiversity, the balance of nature, wildlife and the environment. Animal welfare can be compromised. Many argue that we are producing enough food to feed everybody already, rather it is equitable food distribution that is the problem.

The main concern with GM foods is that we are unable to predict what impact they will have. There is little known about what social, economic and environmental implications GM foods and production will have. Many people think this is one case where it is better to be safe than sorry.

SMART BEAUTY

Not only are there potentially lots of chemicals in the food we eat there is also a lot of chemicals in the products we put on our body. All in the name of beauty! But it is possible to look good, reduce your exposure to chemicals and be friendly to the environment.

Unfortunately there is no black and white answer to choosing 'green' cosmetics but when buying a new product ask yourself these questions.

It is particularly important that we are careful of the chemicals in cosmetics and personal care products because they come in intimate contact with our bodies.

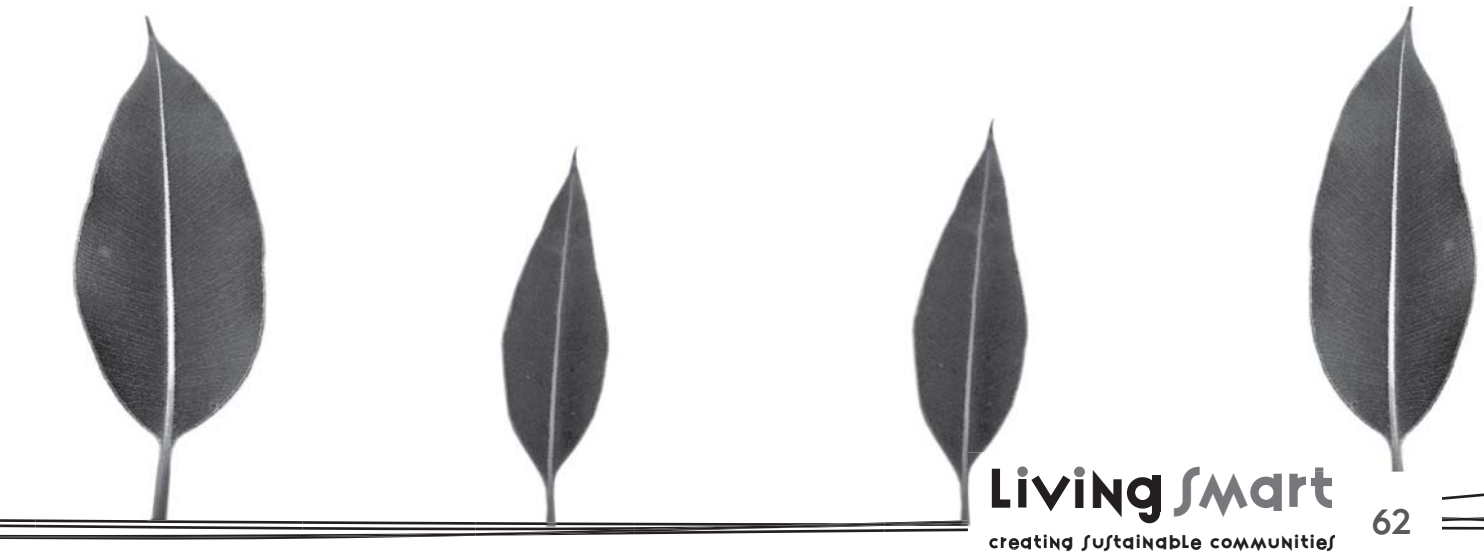
1) What is in the product? Look for ingredients that are plant based rather than petrochemicals or mineral oils. Read the labels and try and avoid the below ingredients.

- Avoid surfactants such as cocamide diethanolamine, diethanolamine, triethanolamine.
- Avoid products that contain silicones such as dimethicone and cyclomethicone.
- Avoid formaldehyde, also known as methanal, formalin or formol.
- Avoid solvents such as methanol, acetone, turpentine, toluene, benzene and benzalhyde
- Avoid shampoos with sodium lauryl sulfate, sodium laureth sulfate, ammonium lauryl sulfate and ammonium laureth sulfate.

2) Where did it come from and how was it made? Try to buy local, from sustainable plantations or from organic farms.

3) Is it tested on animals? Many people are ethically against the testing on animals particularly for cosmetic products.

4) How is it packaged? Avoid excessively packaged products. Buy products where the containers can be reused or recycled. Better yet purchase from shops where you can take the container back and have it refilled.



Some recipes for Smart Beauty

- Soak oatmeal in water and use the water as a cleanser for your face.
- Buttermilk can also be used to gently cleanse the face.
- Bicarb soda is a great exfoliater and you can also use it to brush your teeth.
- Mix a lightly beaten egg white with a little lemon juice to make a facemask for oily spotty skin. Smooth over skin, allow to dry and rinse with warm water.
- Raw honey mixed with natural yoghurt makes a great facemask. Apply to damp skin, leave for 30 minutes, then massage into skin and rinse.
- Witch hazel is a freshener and toner for oily skin and is available from supermarkets and chemists.
- Almond and apricot oils can be used as a facial moisturiser.
- Steep rosemary leaves in water and use the water as a rinse to enhance dark hair. Similarly chamomile leaves can be used for blond hair.
- Make a bath bag, from a thin muslin bag filled with your favourite herbs and petals.

LETS GET PHYSICAL!

One of the most important steps to a healthy lifestyle is regular exercise. Day to day physical activity has reduced significantly in modern times, because we seem to work more, have less time, rely heavily on our cars and spend more time sitting in front of the TV and computer. To ensure a healthy lifestyle we all need to find ways to fit physical activity into our daily routine. Remember it is never too late to start, and once you do you will start enjoying the benefits straight away!

Benefits of regular physical activity

You will live longer	Be less likely to have a heart attack/stroke
Feel more energetic	Have a healthier blood cholesterol level
Manage your weight better	Have lower blood pressure
Have stronger bones and muscles	You will think better
Feel more happy, confident, relaxed	You will sleep better
Less likely to get diabetes or cancer	Have a better immune system

Research shows that it doesn't matter how active you were many years ago, it is how active you are now that counts.

Some guidelines to help you become more active

Be active every day in as many ways as you can – do things yourself instead of using labour saving machines. This can be anything from hanging out the washing instead of using the dryer to taking the stairs instead of the elevator.

Put together at least 30 minutes of moderate physical activity on most days. Moderate activity includes things such as gardening, brisk walking or cycling. These can also be done in smaller blocks of time eg. 3 x 10 minute walks.

If you can, also enjoy some regular, vigorous exercise for extra health and fitness. Dancing is especially good!

Some simple ideas for getting started

The major barriers to physical activity are not enough time, no motivation and other priorities. These are poor excuses because physical activity can be built into your day and there is nothing more important than your health and well-being. The less physically active you are, the harder it gets, the less you do and so on till you feel you can't do any physical activity anymore. So the sooner you start the better.

- Do some work in your garden or on your house.
- Get off the train or bus a stop earlier and walk the extra distance.
- Don't drive when you can walk or cycle easily.
- Encourage your family to walk together regularly.
- Take the dog for a walk.
- Meet family and friends for a picnic and a game of cricket.
- Play a round of golf.
- Get together with colleagues at work and organise some lunchtime activities.
- Go for a swim.
- Join a local sporting team.

How to ensure you stay active

To ensure that once you start being active you stay active consider the following tips:

- Vary the activities so you don't get bored – variety is the spice of life!
- Choose an activity you enjoy – you don't have to go to the gym if you don't like it.
- Make sure you have the right equipment – comfy shoes etc..
- Don't overdo it when your just starting out – enjoy it, take your time and improve as you go.
- Make it fun and get friends and family involved.

HEALTH FOR YOUR SOUL

We all know that stress and anxiety can have a detrimental effect on your health, attitude and wellbeing. A healthy lifestyle means not only looking after your diet and exercise but ensuring you have a healthy soul as well. There are many ways you can pamper your soul, help your self relax and become generally happier. Techniques such as meditation, aromatherapy, yoga, relaxation, and pilates have been around a long time and are becoming increasingly popular. Create your own regular health routine for your soul and you will start feeling the benefits immediately. This can be anything from going to a weekly yoga class, setting aside three times a week for meditation exercises or just taking ten minutes at the beginning and end of every day to stretch and relax. If you are not sure what will work best for you or how to get started, then do some research. There are many books, videos and classes for a whole range of these techniques.

TOP 5 TIPS for living health smart for you!

- Following our six principles of eating for sustainability and health.
- Incorporate at least one form of relaxation technique into your week.
- Incorporate regular daily physical activity into your routine.
- Eat one more serve of vegetables and one more piece of fruit a day.
- Replace some of your chemical cosmetics with 'green' ones.

Want to find out more?

Books

Berthold-Bond,A. (1997) The Green Kitchen Handbook: Practical advice, reference and sources for transforming your home into a healthful, livable place. HarperCollins.

Ha, T. (2003) Greeniology: How to live well, be green and make a difference. Allen & Unwin, Sydney.

Dingle,P. & Brown,T. (1999) Cosmetics and Personal Care: Dangerous Beauty

Websites

www.drdingle.com – where you can download articles on; food additives and contaminants, green products and safe foods and pesticides in food.

www.healthinsite.gov.au

www.find30.com.au

www.greenpeace.org.au/truefood - for information on genetically modified food

Living Smart

creating sustainable communities

Health Smart Home

Creating a healthy chemical free home

Just because a product is readily available on the supermarket or hardware shelf doesn't mean it is safe. In fact, the chemicals used in your home are the least regulated and controlled.

INDOOR AIR

The average Australian spends up to 80 to 90% of their time indoors (home, car and work). Modern construction of buildings have made homes more snug and airtight but have reduced ventilation and air exchange resulting in a higher concentration of indoor contaminants. Indoor air is far dirtier than outdoor air. In fact it can be up to ten times dirtier. Indoor contaminants include volatile organic compounds, dust and mould.

Volatile Organic Compounds (VOC's)

What are they? VOC's are a class of carbon-based chemicals, which evaporate easily at room temperature giving off vapours that can be inhaled.

Where do they come from? They can be generated from sealants, varnishes, paints, adhesives, lacquers and polyvinyls which are all part of your floors, walls and furnishings. Personal care products including makeup, deodorant, detergents, new clothing and even hot water emit VOC's. Many cleaning products also emit large amounts of VOC's.

What do they do? The effects of being exposed to low level concentrations of VOC's over extended periods of time, like we are at home and work, is not known. It is known however that in the short term VOC's can irritate eyes, nose and throats, cause headaches and impair thinking and concentration. Some are linked with cancer and asthma.

What solutions are there? Take less chemicals into your home, cut down on cleaning products and personal care products, and use non-toxic alternatives. Don't use air fresheners, spray cans or poisonous baits. Generally all new furniture including soft furnishings should be aired outside to allow toxic chemicals to dissipate.

DUST

What is it? On a normal day we breathe in about a teaspoon of microscopic dust particles. These include a cocktail of nasties such as skin cells, dust mites, mould and bacteria, insect parts, fibrous material, inorganic particles and chemicals.

> ***Take your shoes OFF!***
>
> By just removing our shoes at the front door we can cut down about 50% of the microscopic dust in the air.

What does it do? Microscopic dust first enters our lungs and from there the smallest stuff is able to penetrate our blood stream and lodge in various body organs causing free radical damage. Microscopic dust contributes to all forms of respiratory infection and disease, such as bronchitis and pneumonia, as well as cardiovascular disease and strokes. It can also irritate our nose and throat, cause headaches, nausea and allergic reactions such as asthma.

What solutions are there? Take your shoes OFF! By just removing our shoes at the front door we can cut down about 50% of the microscopic dust in the air. Also make sure that you vacuum with an efficient vacuum cleaner. Bag vacuum cleaners don't work as well but a vacuum cleaner with cyclonic action and HEPA filter does a great job and this is especially important if you or your children are asthmatic. Use a micro fibre cloth rather than a rag or duster. A rag will push a lot of the dust back into the air which settles again later. A microfibre cloth will actually grab the dust and hold it.

Mould & Dust Mites

What is it? Mould can range from white to orange, or green to black; it can be powdery, slimy or hairy. Much of the mould indoors comes from outside and it loves moist areas. Dust mites are microscopic organisms that feed on dried out human skin. Like mould they love moisture in fact they need mould to help them survive.

What does it do? Exposure to mould spores is serious; the effect of mould on the respiratory health of children is comparable to the effect of passive smoking. Other health effects include asthma, chronic bronchitis, rhinitus, nasal congestion, coughs, wheezing and a sore throat. Similar effects are found with dust mites which are one of the most common triggers for asthma.

What solutions are there? Eliminate sources of moisture, open the bathroom window and install a fan. Treat a mould problem with soapy detergent or a 10% solution of household bleach in water (no stronger than that). Mould also grows on your pillow. If your pillow is older than six months there is enough mould on it to give you a runny nose. Take it outside every couple of months and leave it in the sun for six hours, beat it with a tennis racket and vacuum it. Also hang your doona up in the sun, mould and dust mites hate fresh air. Open the doors and windows in your house to let fresh air in and take out the moisture. Don't keep your home at a constant temperature all year, it creates a perfect breeding ground for mould and bacteria. Let the house cool in winter and heat up a little in summer.

HOUSEHOLD CHEMICALS

Up to a hundred different chemical-based products are in regular use in the average household. Chemicals used in your home are the least regulated and controlled. Each day normal household activities such as doing the dishes, washing your clothes, showering, shampooing your hair, or renovating can bring you into contact with products containing chemical contaminants. In many cases we do not know all the effects exposure to a chemical may cause. Just because a chemical is readily available on the supermarket or hardware shelf does not mean it is safe. These chemicals can damage your health through long-term exposure to low levels through eating, breathing or skin contact. In addition to exposure to VOC's there is the risk of acute poisoning, especially of children, if these chemicals are not stored properly.

Not only can these products be bad for your health they can also be bad for the environment. Chemicals and fertilisers used in the home find their way into waterways, contributing to algae growth and their concentrations can build up in the food chain, especially in fish and birds.

When Buying Chemicals

In the marketing of chemicals and cleaning products the words non-toxic and natural are often used with little or no meaning. There are no government regulations or legal definitions of these words. Stick with substances that are usually made of just one chemical that is not very toxic. Avoid chemicals that have phosphates, nitrates or chlorine. If the label on a spray can says "May be harmful or fatal", think twice about spraying this in your house or on your body, look for safer alternatives.

Non-toxic Alternatives

There are a number of natural, low toxic alternative cleaning products which you can use to substitute your chemical based products. You may already have many of these products in your home or they can be bought from the supermarket or natural food store. Using these alternatives will not only be cost effective but will also be safer for you, your family and the environment.

Baking Soda – (sodium bicarbonate) an all-purpose, low toxic cleaner. Cleans, deodorises, removes stains and softens fabrics.

Borax – (sodium borate) A natural mineral that kills mould and bacteria. An alternative to bleach, it deodorises, removes stains and boosts the cleaning power of soap. It can also be used as a bait to control ants.

Approximately 7000 people in Australia attend accident and emergency departments at hospitals each year as a result of accidental poisoning by household chemicals.

Castile and Vegetable based soaps – Cleans everything.

Cornstarch – Starches clothes and absorbs grease.

Herbs and essential oils – For disinfecting and fragrance.

Lemon Juice – Cuts through grease and removes perspiration and other stains from clothing - an alternative to bleach.

Salt – An abrasive.

Toothpaste – A mild abrasive.

Vinegar – (Acetic acid) Cuts grease, removes stains, is an excellent water softener and gets rid of minor mould problems.

Making your own cleaning products

To save time and money make your own cleaning products, buy the ingredients in bulk (for cost savings and to avoid excessive packaging), make large batches of the recipes and store them in reusable airtight plastic containers and spray bottles. Using the ingredients already listed there are many cleaning products that can be made, some are listed below.

- For cleaning in the bathroom make a paste out of baking soda and vinegar.
- For an air freshener set a cotton ball soaked in vanilla extract on a saucer, or place citrus rind in water and simmer on the stove.
- For polishing furniture 1 tablespoon of lemon juice with two tablespoons of olive oil and rub with a soft cloth.
- For a good disinfectant mix 1/2 cup of borax in a gallon of water and add some eucalyptus oil.
- For an all purpose cleaner dissolve baking soda or borax in warm water.
- For windows put equal amounts of vinegar and water in a spray bottle and use newspaper for a streak free clean.

Just because a chemical is readily available on the supermarket or hardware shelf does not mean it is safe.

Chemicals used in your home are the least regulated and controlled.

Storage of Chemicals

- Always make sure they are clearly labelled.
- Store out of reach of children and make sure containers are sealed.
- Do not store under the sink where little hands can get at them.
- Always follow instructions on the label.

Disposal of Chemicals

- Dispose of garden chemicals according to instructions.
- Do not incinerate aerosols.
- Do not pour oil or chemicals down the drain.
- Do not put unwanted pesticides, fuels or solvents in the rubbish bin.
- Empty containers can be wrapped and placed in the bin.
- Avoid the problem of disposal by buying only what you need to do the job.
- Contact your local council if you have any questions.

TOP 5 TIPS for living health smart for your home!

- Replace your chemical cleaning products with non-toxic alternatives.
- Take your shoes off before coming inside.
- Open the windows and ventilate your house regularly.
- If you have to buy chemicals buy only what you need for the job.
- Buy microfibre clothes and dusters and invest in a good vacuum cleaner.

Want to find out more?

Books

Dingle,P. & Brown,T. (1999) Sick Homes, Part 1: Volatile Chemicals Available from Fremantle Public Library

Dingle,P. & Brown,T. (2002) Sick Homes 2: Dust and the Science of Cleaning

Ha,T. (2003) Greeniology: How to live well, be green and make a difference. Allen & Unwin, Sydney.

Schluter,J. (2002) 1001 Greener Household Hints. Hinkler Books, Vic.

Stewart,R. (2003) Australian Green Home and Garden: Practical and Inexpensive ways to Reduce the use of Chemicals in your Home and Garden. Black Inc, Vic.

Websites

Downloadable from www.drdingle.com are articles on;

- Dangerous Dust
- Indoor Air
- The Asbestos of a New Generation: indoor air quality and mould
- Stress and Toxic Chemicals
- Cleaning Questions and Answers
- Drinking Water down the mouths of the public

Living Smart

creating sustainable communities

Community Living Smart

Making a difference in your community

Now that you have made some changes to make your home more sustainable, you may be wondering what else you can do to contribute to sustainability. There are many ways that you can get involved, influence others and make a difference. Remember you may not be able to change the world overnight but all change has to start somewhere, no matter how small.

Read the ideas below on how you might take some smart action. Smart action doesn't necessarily mean chaining yourself to a tree, marching or jumping in front of bulldozers. It is simply about acting on your beliefs and letting others know what is important to you and can be as simple as writing a letter or talking to your neighbour about something you feel passionately about.

Stay Aware

Make sure you are aware of the issues in your local area so that you can get involved in the issues that are important to you. Read your local newspaper, it is a valuable source of information about local events, developments, initiatives etc.. Any proposed developments, draft management plans or draft policies and guidelines have to be advertised by law in the West Australian and can often be found in the local newspaper. Attend council meetings and find out what is going on in your local council. Keep an eye out for community consultation/ information sessions, run by government departments to gain community input into new plans, policies and developments.

Powerful Choices

Don't underestimate the influence that your consumer choices can have in the market economy. What you buy is how you let companies know what you do and don't like. By making choices that are based on sustainability considerations your interests will be reflected back to the companies and manufacturers. If you can recognise the environmental worthiness of a product then other people are able to as well and together your choices can make a difference. It's true. After all there are a lot more environmentally sensitive products on the market today than there was ten years ago. That's because there are consumers that have supported those products.

The Power of Networking

If you find a good product or don't like something tell your friends and tell them to tell their friends. Then tell the people at your work, local sports group etc., and really spread the word. You will be surprised how fast and how far the information will travel. This is why network marketing works because it relies on people saying how good a product is to another person. People are much likely to believe the words of someone they know than a mass advertising campaign.

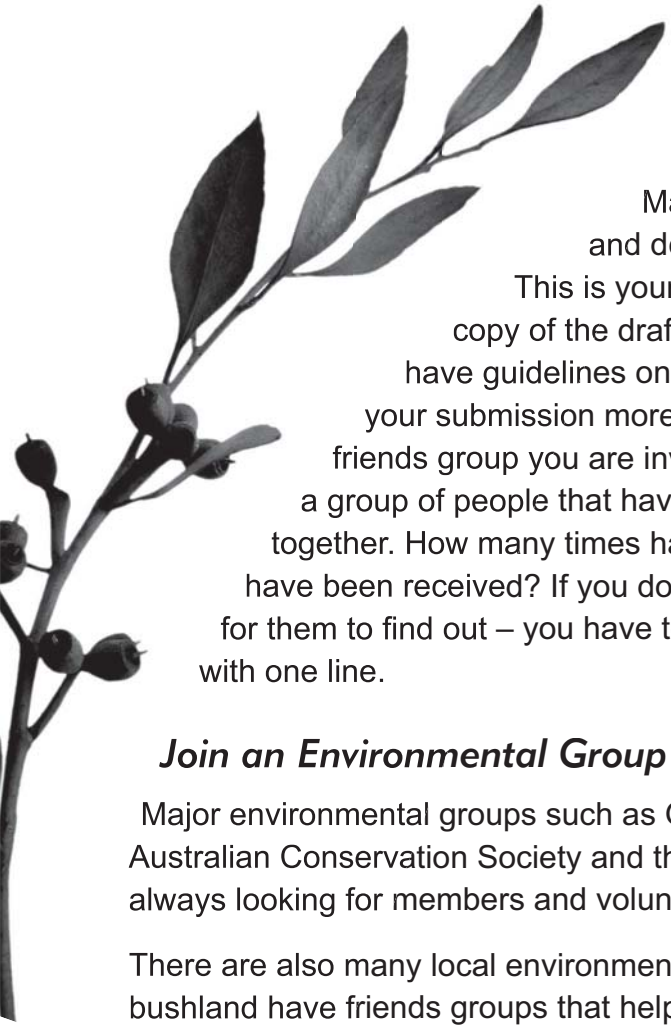
The Power of the Pen

Letter writing - Making your voice heard can be as simple as writing a letter and there are an endless array of people and organisations you can write to. You can write to your local newspaper, local council members, parliamentary representatives, companies and manufacturers to raise your concerns. You may be surprised at the reaction you get – elected politicians are always aware that they may not be re-elected. One letter can represent a hundred votes to a politician. Likewise companies and manufacturers are always concerned about their public image. Often those people in positions of power may be unaware that people feel strongly about an issue – unless you tell them.

When you are writing a letter there are four points you need to make;

- what it is that you are concerned about
- what you want the receiver to do
- ask a question (then they have to reply)
- make your claim – you want, wish, expect, demand, insist etc…

Choice magazine is a monthly consumer's magazine published by the Australian Consumers Association. The not-for-profit association independently assesses products and services so that you can choose the best one for your health, budget, lifestyle and the environment. Choice magazine is available at most local libraries or you can look at their website (www.choice.com.au) for subscription information.



Making a submission – Most draft policies, guidelines and development proposals are first open to public comment. This is your opportunity to have your say. You will need to get a copy of the draft report from the appropriate department, which will have guidelines on how to submit your submission. If you want to give your submission more clout write on behalf of a community group such as the friends group you are involved in (make sure you have their agreement) or form a group of people that have similar concerns as you and write the submission together. How many times have you read in the local newspaper that no objections have been received? If you do object or have some concerns there is only one way for them to find out – you have to tell them in writing. If it is hard to get started, just start with one line.

Join an Environmental Group

Major environmental groups such as Greenpeace, the World Wide Fund for Nature, the Australian Conservation Society and the Conservation Council of Western Australia are always looking for members and volunteers to help support their ongoing activities.

There are also many local environment groups that you can join. Many areas of local bushland have friends groups that help to maintain and manage these areas, your involvement can mean anything from weeding, to attending meetings to designing information signs and trails. There are also many coast care groups or you can volunteer at a local environment centre. The Australian Trust for Conservation Volunteers seek volunteers both on the weekends and during the week to help with conservation projects locally, throughout Western Australia and even some overseas.

Organising your own Group

Many local environment groups and community groups form in response to a specific issue or crisis. If something is occurring that is important to you, you will probably find that there are others that feel the same way. Don't be scared to get together with these people, start talking about your concerns and thinking about ways you can deal with the issue. If fact Australia has a history of local groups that have made a difference – landcare groups, friends groups, habitat protection groups, water monitoring groups etc. Margaret Mead a famous anthropologist and social activist said, 'never doubt that a small group of thoughtful, committed citizens can change the world. Indeed it is the only thing that ever has.'

> 'Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed it is the only thing that ever has.'
>
> Margaret Mead.

One in five Australians contributed some time or money to protect the environment in the twelve months prior to March 2001.

How to get started

If there is an issue in your community that you are concerned about and no one else is taking action that you can get involved in, you may want to start your own group.

To form a group you will need other people. Start by talking to friends, neighbours and family to find other people that are concerned about the issue. Write something up to go in the local paper about the issue and ask for people who are interested to contact you. You can drop letters/pamphlets in the local area or if you have the time door knocking can be very effective. Once you have established a group of people who are interested have your first meeting!

Your first meeting

Over your first few meetings your group will have to make some crucial decisions to make sure you get off the ground. You will need to discuss both the logistics of running your group and the issue itself. A successful group that stands the test of time will be a well organised group that knows its purpose.

Logistics

- A name for your group.
- How often will you meet, where will you meet, how will the meetings be run?
- Who is going to take on the different roles; leader, treasurer, time keeper, minutes keeper?
- How will you make your decisions?
- Will you become a registered organisation? Many small community groups register as incorporated associations.

The benefits of becoming an incorporated association include, being eligible for non-profit status, limited financial liability for board members, and you can apply for government grants. As an incorporated association you will need public liability insurance, a constitution and up to seven board members. It may not be something you want to do straight away but should be kept in mind for the future. You can find out all you need to know from the Department of Consumer and Employer Protection www.docep.wa.gov.au/associations

The Issue

- What is the problem you are trying to deal with?
- Why is it a problem?
- What will have to happen for the problem to be solved?
- What is your group's mission statement? A mission statement will clearly state your aims and objectives and should include what you do, for whom and your uniqueness.

Your plan

A written plan or strategy will form the foundation of what your group does. It will become like an ever evolving bible. Planning will help you work out what you want to change and how you will achieve it. You may not be able to do this in your first meeting it may take some time and research but start planning from day one. This will give you direction and prevent you from wasting your time and efforts.

In your plan you must,

Identify the problem. What is the problem, why is it a problem, where is the problem happening, who is causing it, who is it impacting on, when will/did it happen?

Put it in a context. What are the views of the community, industry and government about the problem? Who are your allies, where might you get help?

Solutions to the problem. Try brainstorming the ideal solution and then identifying what would have to happen to reach that solution. Set some goals, what is it you want to achieve. How will you achieve this goal, what are the steps that need to be taken? This is where you have to get specific. Define the tasks, set a realistic timeline, who is going to be responsible for what? What resources will you need, manpower, time, equipment, money? Do you have these resources if not where can you find them? Do you need a budget?

How to find funding. It is likely that at some stage you are going to need some funding to support your project. There are a number of ways that you can find money. Some old fashioned fundraising in your community (you can make it more imaginative than a lamington drive). You can find financial supporters or donors. You can apply for foundation grants, government grants or corporate sponsorship, www.citizenscape.org.au has a lot of information on current funding opportunities for community groups.

Evaluation. How will you know when you have achieved your goals? How will you know that your plan is working? Set some measurable goals along the way. It will help your group stay motivated if they can see they are making progress. Evaluate at the end of each major stage or accomplishment. Then celebrate your achievements!

The majority of people (93%) who said they were concerned about the environment in 2001 did not belong to any environmental group.

Want to start your own Living Smart Group

If you love Living Smart as much as we do and want to make sure it gets out into your community consider starting your own Living Smart group. You could do this with your friends and family, approach your neighbours and start a neighbourhood group or do it as part of another group you are already involved in. If you are interested then visit the Living Smart website www.livingsmart.org.au for materials and guidance.

Some ideas for setting up your own Living Smart program

- Do it with a neighbour or a friend, get together and share the information and processes
- Set up a family group maybe uncles, aunts, cousins and other family members who don't live in the same house.
- Set up a Living Smart street. Do a letter drop and see how many people are interested. Remember to make your invite sound interesting and fun. You only need two to get started and then others can come in later.
- Set up an office Living Smart or get the whole workplace interested if you can find the support.
- Set up a Living Smart classroom for your kids or local school.
- Maybe you already belong to a community group that meets regularly e.g. a friends group or precinct group. You may want to incorporate Living Smart workshops into your regular meetings.
- Set up a network of Living Smart participants to develop ideas and get together to run your own meetings and program.

TOP 4 TIPS for living community smart!!

- Stay aware of what is happening in your community.
- Get involved in at least one community group or set one up.
- Take part in community consultation processes.
- Spread the knowledge you have learned from this book to friends and family.

Want to find out more?

Books

Carr,A. (2002) Grass Roots and Green Tape: Principles and Practices of Environmental Stewardship. Federation Press, NSW.

Websites

The Department of Local Government and Regional development has a CommunityWise Toolkit that can be downloaded from their website. This has information on orgainsing meetings, obtaining funding, case studies etc. www.communitywise.wa.gov.au

The website www.citizenscape.wa.gov.au has a lot of information on networking, forming a group, volunteering, making it happen, using the media and learning opportunities. It also has a lot of information on citizenship and on current consultation processes and meetings. www.citizenscape.wa.gov.au

Greenpeace is another source of valuable information on getting active, forming groups, having meetings, using the media and getting noticed. www.greenpeace.org.au/getactive

www.active.org.au/perth is a website where information about events, news and groups that are working towards social action can be posted.

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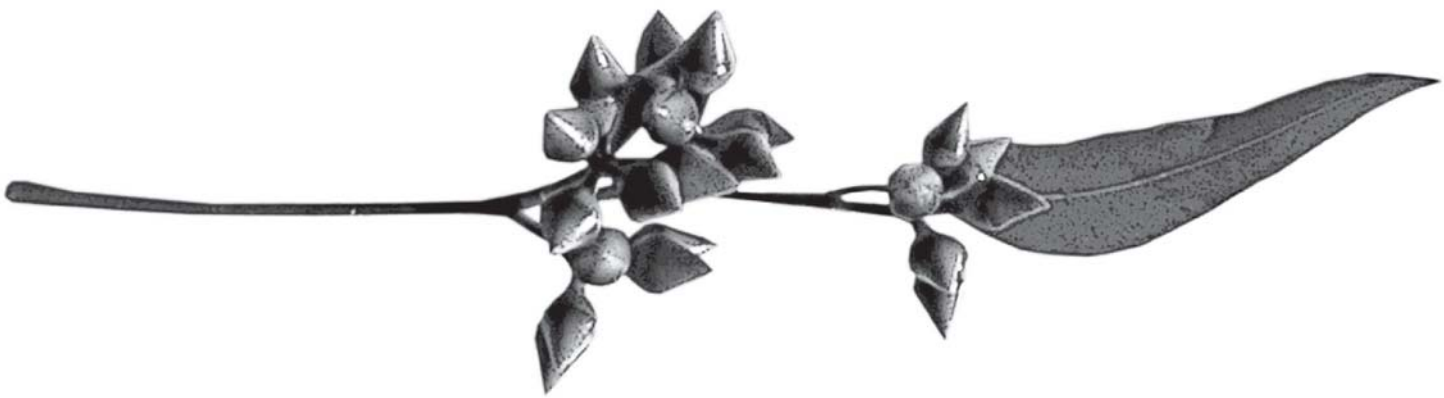

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