

Footprint

CHOOSING TODAY FOR A
SUSTAINABLE TOMORROW

EDITION
one
APRIL 2007



Welcome to the first edition of *Footprint*. This is the publication of Australia Post's sustainability program. It's about addressing the challenges we face today so we can look forward to a better future.



This edition contains energy-saving tips for work and home. The tips are really simple, so you can start saving energy (and money) straight-away.

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Saving our energy

Reducing our energy consumption – both at work and at home – is about much more than saving money. By using less energy we can slow global warming and create a better world for our children.

In Australia, the amount of energy we consume is rising rapidly. In fact, our nation's annual energy consumption doubled in the 25 year period between 1975 and 2000.

During this period we used energy as if it were a limitless commodity. But over recent years, as a society, we've become much more informed about the need to conserve our energy resources and use them in a way that is sustainable.

This is not just a challenge for us as individuals, it's also a corporate challenge for Australia Post – as well as a national and global necessity.

The global warming challenge

Without doubt, you would have heard of the threat posed by "global warming" or "climate change" – but what do these terms mean?

Put simply, the production and use of energy (including electricity, gas, petrol and oil) generates gases that are released into the atmosphere. These "greenhouse gases" create a blanket that traps heat in the Earth's atmosphere and causes temperatures to rise. The repercussions of this global warming are believed to include drought, flooding and some other natural disasters.

Our national target

Most of the world's nations are tackling the global warming threat through the Kyoto Agreement, which aims to reduce annual greenhouse gas emissions to 1990 levels. While Australia hasn't signed the Kyoto Agreement, we're still aiming to achieve our national target (which is 108% of 1990 levels).

One of the ways this is being tackled is through the Federal Government's voluntary Greenhouse Challenge Program. Post has been a member of this program for 10 years.

In 2006, the Federal Government also passed the Energy Efficiency Opportunities Act, which requires major energy users (like Australia Post) to assess our energy usage and report annually on how we are reducing consumption.

It's our responsibility

Saving energy is not the responsibility of just a few people. It requires a commitment by the entire population. This first edition of *Footprint* explains the challenges we face as a society and the changes we need to make – at work and at home – to build a future based on sustainable energy use.

Australian energy use

When it comes to energy consumption and greenhouse gas emissions, Australia does not have a proud record. In fact, our high levels of energy consumption mean we rank among the worst polluters in the world.

According to OECD figures, per head of population, Australians are the 5th biggest consumers of energy in the developed world.

A separate OECD calculation ranks Australians (per capita) as the developed world's greatest emitters of greenhouse gases.

This embarrassing result stems from the fact that we live in an affluent society with an abundance of cheap, natural resources that we take for granted.

As a consequence, a lot of our buildings, our transport systems and our modern lifestyle haven't been designed to be energy efficient.

So how much are we emitting?

The average Australian household is responsible for releasing the equivalent of 28 tonnes of greenhouse gases into the atmosphere (as a result of energy use) each year.

But what do we mean by a "tonne of greenhouse gas"? Well, if you completely filled up the average family home with carbon dioxide gas, it would hold about one tonne of greenhouse gas.

So, if you're trying to picture how much greenhouse gas the average Aussie household is emitting, you should picture 28 houses full of greenhouse gases – just floating up into the Earth's atmosphere (each year).

What can we do about it?

As individuals, we all want to enjoy a comfortable lifestyle and as a business we need to continue to transport mail and carry out our everyday activities. So we can't simply stop using energy – but we can be a lot smarter and use energy more efficiently.

We can all make simple changes to our behaviour that will help reduce our energy use and minimise our environmental impact. This first edition of *Footprint* has been collated to tell you about the energy-saving changes you can make – at work and at home.

On page 7, we've listed 10 things you can do at home to start saving energy immediately.

About this publication

Footprint is mailed to the homes of all Australia Post staff – and to the work addresses of all licensees and mail contractors. This is the first of six editions of *Footprint* that will be published over the next two years.

The Footprint campaign aims to highlight the many ways each of us can contribute to building a sustainable future for our business – and our world. For more information, please write to us:

E-mail: sustainability@auspost.com.au

Mail: The Footprint campaign
c/o The Environment Manager
Australia Post
GPO Box 1777, MELBOURNE VIC 3001



Footprint is printed on a paper stock called Nine Lives which is made from 85% recycled paper. It is printed using environmentally-friendly vegetable and soy inks. We hope you'll file this edition in a special place and refer to the energy-saving tips regularly. However, if you do choose to dispose of this edition, please throw it in the recycle bin.

Energy use at Australia Post

Australia Post keeps accurate records of all the energy that we are using, so it's possible to track and measure our environmental impact.

During 2005, our business consumed:

216 million kilowatt hours of electricity

106 million megajoules of natural gas

25 million litres of diesel

6 million litres of petrol

31,180 litres of heating oil

78 tonnes of bottled gas

And we disposed of **15,820 tonnes** of waste to landfill

Australia Post's greenhouse gas emissions have increased by about 15% over the past 15 years (from 304,093 tonnes of CO2 in 1990 – to 349,871 tonnes in 2005).

So allowing for the Kyoto Agreement's target of an 8% increase on 1990 levels, as a corporation we still need to reduce our current greenhouse gas emissions by some 21,451 tonnes over the course of a year to achieve our national target.

Two-thirds of our greenhouse gas emissions are generated through the use of electricity and almost another third through the fuels used by our vehicles. So these are our target areas for energy reduction.

We're already taking action

We're currently reducing our corporate energy use by implementing a range of energy saving initiatives and programs. It's estimated that the programs we already have underway could reduce our corporate energy use by about 12%.

Some of the energy-saving initiatives being implemented at selected Australia Post facilities include:

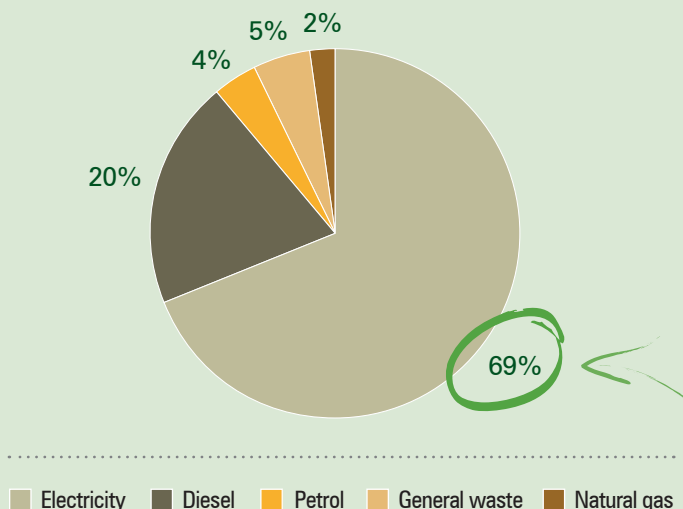
- Rewiring internal lighting to allow lights in unoccupied areas to be turned off.
- Installing timers on air conditioning so it turns off automatically when the area is unoccupied.
- Replacing high-energy light fittings with low-energy alternatives.
- Installing after-hours switches in open plan offices.
- Installing occupancy sensors in some offices.
- Installing insulation in ceilings.
- Installing building management systems for energy.
- Monitoring electricity consumption via web-based systems.
- Installing voltage reduction units which reduce electricity consumption without changing the light output.

When the emissions from all of these sources are added together, they amount to Australia Post emitting 349,871 tonnes of greenhouse gases in 2005.

But it's in your hands, too

But despite these infrastructure improvements, about 25% of our corporate energy usage is entirely in the hands of staff – which means your day-to-day behaviour can have a big influence on our energy practices. On the following pages, we've listed things you can do at work that will help to cut our energy consumption.

The source of Australia Post's greenhouse gas emissions (2005)



Our best chance to reduce greenhouse gas emissions at work is through limiting our use of electricity - especially air conditioning and lighting.

What can I do at work?

Our day-to-day work habits have a real impact on our corporate greenhouse gas emissions. So it's time to stop, think and reassess. Here are some actions you can take that will help conserve energy and save our planet.

Air conditioning

Air conditioning accounts for 62% of electricity use in Australia Post buildings – so turning it off when it's not required is our single biggest chance to reduce our energy consumption.

Take action now:

- Keep windows and doors closed when the air conditioning is on.
- In mild weather, open a door or window (where appropriate) and turn off the air conditioning.
- Turn off lights and office equipment that aren't in use. (This reduces the air conditioning required to cool the heat that they generate, saving even more energy!)

Lighting

Lights account for 28% of all the electricity used throughout Australia Post's buildings. This means our corporate electricity use for lighting is currently causing about 67,000 tonnes of greenhouse gas emissions each year.

Take action now:

- Switch off any unnecessary lights.
- Make it a habit to switch off lights whenever you leave an area or room.
- Turn off all the office and building lights at the end of the day.
- If you're not the last to leave, remind others to turn off the lights when they leave.
- Wherever you have more lighting than you need, organise to have the light globes removed.
- Use natural light by opening your blinds and curtains (unless they help to keep heat in or out).
- Tell your supervisor about opportunities you see to reduce lighting.

FACT:

It's almost always cheaper (and more energy efficient) to turn lights off than to leave them on. Even a fluorescent light should be turned off if you're going to be out of the office for more than 10 minutes.

About 25% of energy usage at Australia Post is determined by the actions of our staff.

FACT:

Leaving a computer on when you're not in the office can produce as much greenhouse gas annually as driving your car from Melbourne to Perth.

Computers

Under the "Refresh Program", Australia Post is currently upgrading all computer screens used in both administration areas and post offices.

Our new LCD monitors are providing a big reduction in electricity consumption when compared to the old cathode ray tube (CRT) computer monitors. A CRT monitor uses around 100 watts, while an LCD monitor uses less than half that – about 30 watts.

Also, as part of the Refresh Program, the power-saving settings are being activated on all new computers to ensure energy-efficient operation.

If you use a computer, there are some simple things you can do to help reduce the amount of electricity used by your computer.

Take action now:

- Switch off your computer when it's not in use.
- Switch off your monitor whenever you leave your desk for more than five minutes.
- Turn off your computer at the end of the day (if it isn't required operationally) so it is off overnight and on weekends.
- Remind other people to turn off their computers when not in use.



Office equipment

In a typical 168-hour week, most of Australia Post's administrative offices would really only be occupied for about 55 hours. For the other 113 hours each week the office is empty – and the equipment isn't being used. So if you leave the office equipment running constantly, it uses about three times more energy than it really requires.

Take action now:

- Turn off electrical equipment when not required overnight and on weekends. Even when office equipment is on standby, it still uses a significant amount of electricity.
- Switch off electrical appliances – at the wall! This includes printers, copiers, computers, radios, chargers, boiling hot water units, white boards, AV equipment and projectors.
- Activate the energy-saving features on office equipment. Most photocopiers, printers, fax machines and scanners can go to "sleep" when not being used, if the "power save" feature is activated.

Tip:

Appoint someone in your office who is responsible for turning off electrical equipment and lights at the end of each working day. Ideally this should be the person who usually leaves last. If the appointed person is leaving early, they should remind a workmate to switch off the lights and equipment.

Vehicles

Driving vehicles (and consuming fuel) is an essential part of what we do every day as a business – delivering the mail. In fact, we have about 10,500 vehicles in our fleet, including 7,300 motorbikes and 1,300 mail vans.

Over recent years we've introduced a range of environmental initiatives that are designed to reduce our corporate fuel consumption. But there are also real opportunities for staff to contribute. If your job involves driving, you can help reduce our fuel consumption by adopting the following habits.

Take action now:

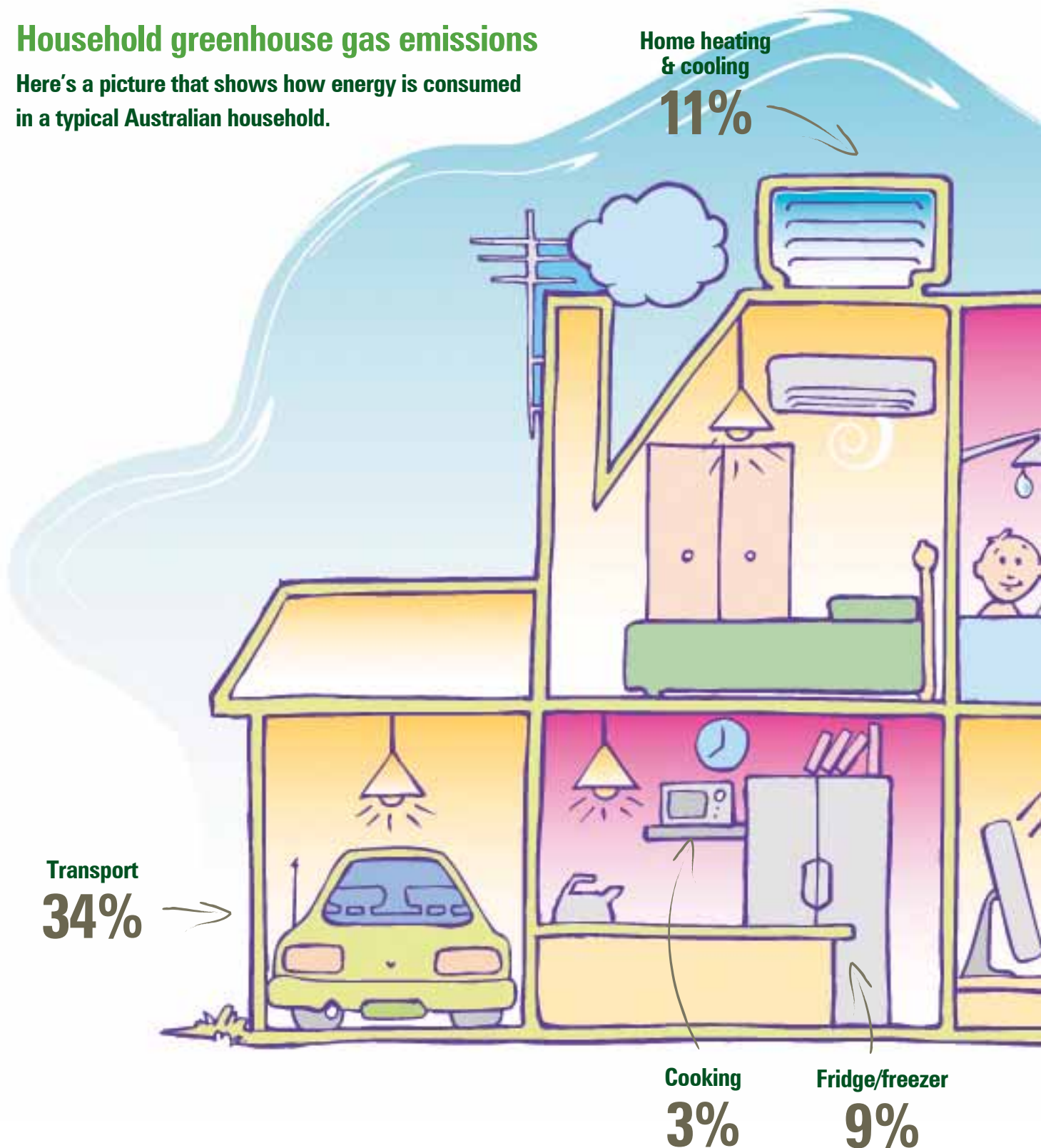
- Drive smoothly and avoid sudden acceleration or braking.
- Turn your engine off during prolonged traffic obstruction.
- Stay under the speed limit to ensure peak fuel efficiency.
- Inflate tyres to the correct pressure.
- Close your vehicle's windows to reduce air resistance and fuel consumption.
- Keep vehicles well tuned and regularly serviced.

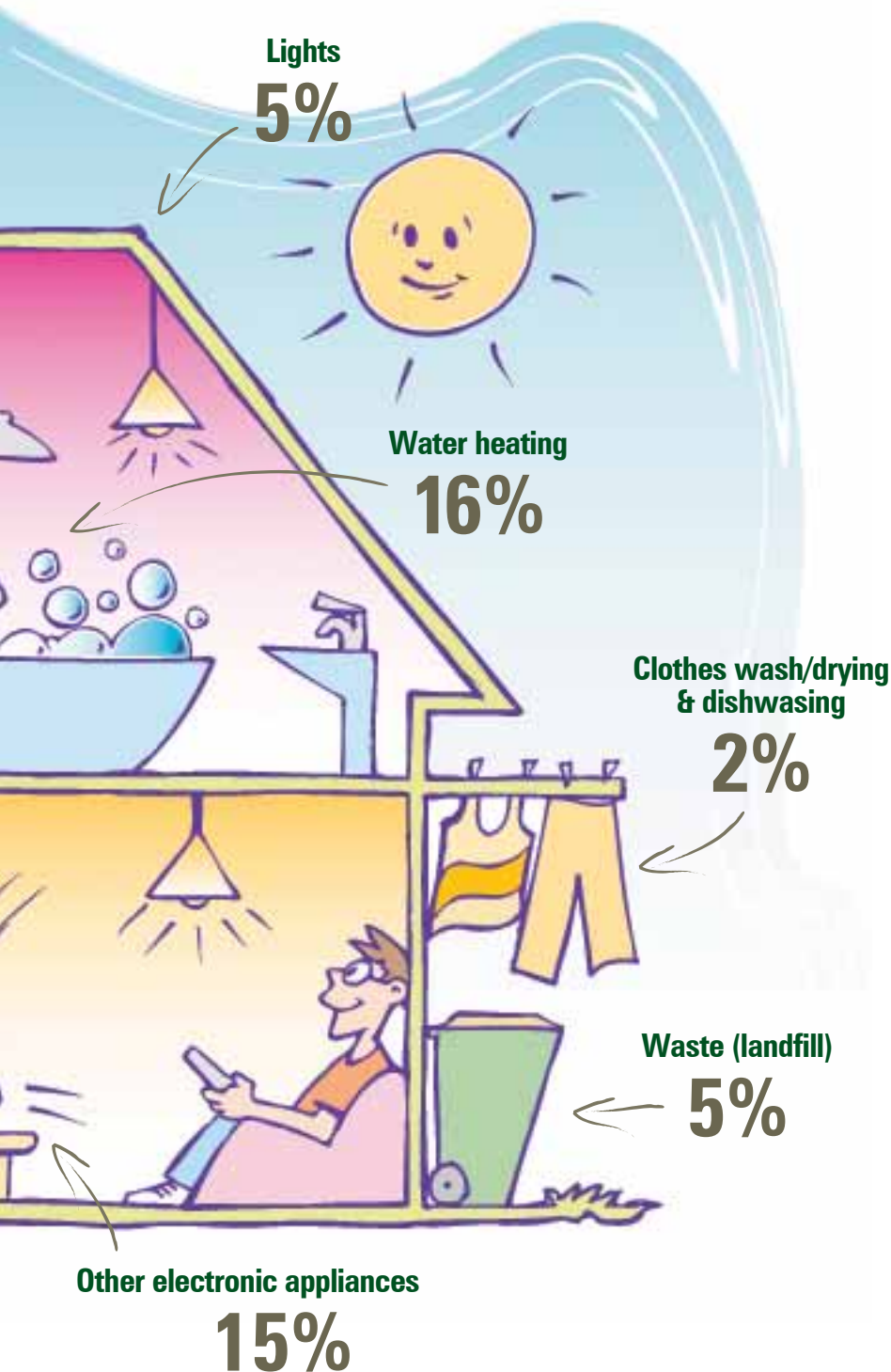
What can I do at home?

You can help create a sustainable future for the next generation (and save yourself a few dollars) by taking some simple steps to reduce your energy consumption at home.

Household greenhouse gas emissions

Here's a picture that shows how energy is consumed in a typical Australian household.





10 ways to reduce your energy consumption today

- 1. Transport**
Walk, cycle or use public transport.
- 2. Water heating**
Take shorter showers, use a AAA-rated showerhead or install a gas-boosted, solar hot water system.
- 3. Green electricity**
Install solar power or purchase renewable energy.
- 4. Appliances**
Always purchase appliances with the highest star rating for energy-efficiency.
- 5. Appliances**
Turn them off at the powerpoint when not in use.
- 6. Heating**
Insulate your home (and keep doors and windows closed).
- 7. Cooling**
Use natural ventilation and close your blinds to keep direct sunlight out on hot days.
- 8. Lighting**
Turn off all lights when not in use.
- 9. Lighting**
Use low-energy compact fluorescent or fluorescent lights.
- 10. Lighting**
Use natural lighting wherever practical.

What can I do at home? *Continued*

Transport

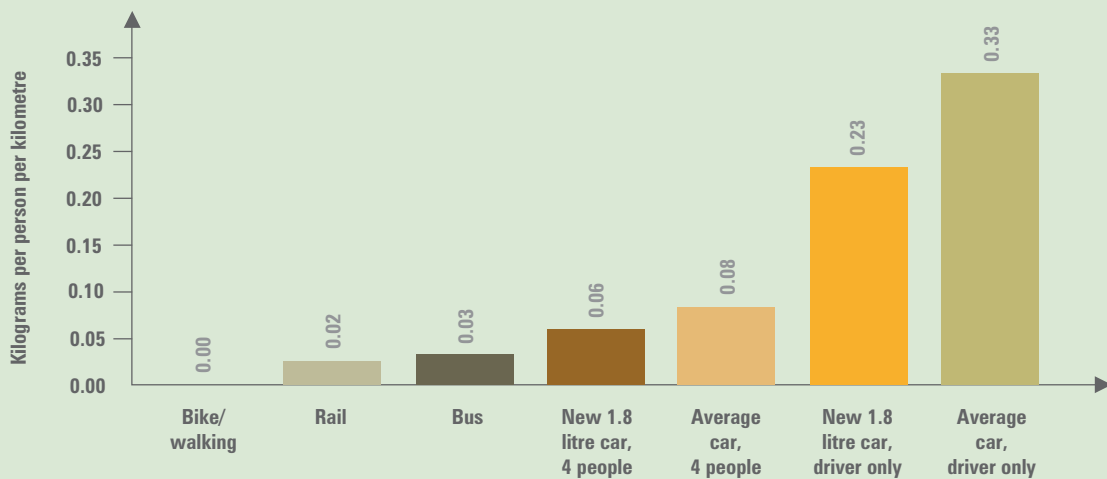
In our private (non-work) lives, our greatest opportunity to save the planet is to start changing our transport habits.

Over the past 50 years, Australia has become a very car-dependent society. As a consequence, many of us now use our cars without thinking about how they are affecting the environment.

Recent increases in the price of petrol may have forced many of us to reconsider how regularly we drive our car, but there is an even greater reason why we should choose to leave it in the garage more often.

Every kilometre saved means less fuel is burnt, which reduces greenhouse gas emissions. As you know, one litre of fuel now costs more than a dollar. But there's also another cost – each litre of fuel emits 2.8 kilograms of greenhouse gases.

A comparison of greenhouse gas emissions for different forms of transport



Using cars efficiently

The reality is that in most circumstances a car is more comfortable, convenient and faster than alternative forms of transport. And for this reason, most of us will probably continue to drive our car.

If you do drive a car, you should make sure that its engine is properly tuned because that will save about 15% of greenhouse gas emissions. You should also consider converting your car to LPG, because that will also cut your emissions by 15% and slash your fuel bill by half!

And when driving, always remember the following fuel efficiency tips.

- Drive smoothly. By avoiding sudden acceleration and braking, you can save up to 30% of your fuel usage. Use cruise control during highway driving (if it's fitted).
- Don't speed. Fuel consumption increases significantly over about 90 km/h. At 110 km/h your car uses up to 25% more fuel than it would at 90 km/h.
- Remove unnecessary weight from your car. By removing 50 kilograms of weight you can reduce your car's greenhouse gas emissions by 2%.
- Pump up your car's tyres to the recommended pressure. This will save 100 kilograms of greenhouse gases per year, as well as prolong tyre-life and improve safety.

← You're in the drivers seat - So save yourself some petrol money!

Tip:

Here's the simplest way to help save the planet:

**AVOID USING YOUR CAR
WHENEVER POSSIBLE.**

Every time you choose an alternative to the car (such as walking, bike-riding or public transport) you will save money and boost your fitness, while cutting your greenhouse gas emissions.



Home heating and cooling

We consume a lot of energy in our efforts to make our lives more comfortable – especially when it comes to regulating the temperature of our homes or heating household water.

Of course, it's important for our health that we continue to live comfortably and cleanly, but there are also a number of energy-efficient (and smarter) options for household heating and cooling.

Take action now:

- Cool your house by simply opening windows and doors.
- Insulate ceilings, walls and floors. (Insulation traps the heating/cooling in your home, so it will slash your power bill and cut your greenhouse gas emissions by one-third.)
- Seal gaps, cracks, fireplaces and vents to keep heated or cooled air inside.
- External shade is the best way to prevent heat gain through windows during summer.
- Internal blinds and curtains will reduce heat entering the house in summer and trap heat in the house during winter.
- Install ceiling fans – they're the most energy-efficient form of cooling.
- Avoid heating or cooling rooms that you aren't using by shutting the doors and closing vents.

Showers account for almost half the hot water usage at home. So taking a shorter shower is a WIN-WIN-WIN-WIN situation.

- 1. Lower power bill ✓*
- 2. Reduce greenhouse emissions ✓*
- 3. Lower water bill ✓*
- 4. Reduce water consumption ✓*

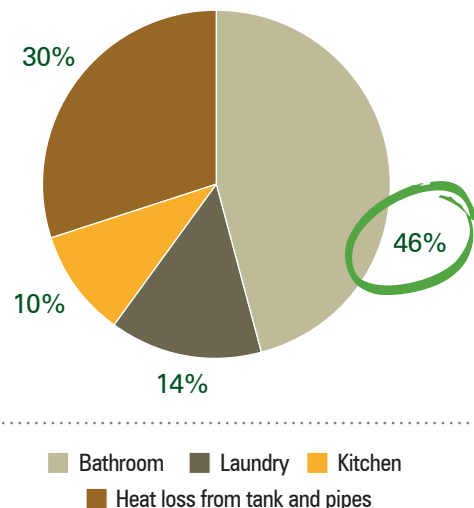
Water heating

Hot water systems are the single biggest users of energy inside the home. In fact, water heaters account for about 16% of our total household greenhouse gas emissions.

Take action now:

- Take shorter showers.
- Install a AAA-rated showerhead.
- Wash clothes in cold water.
- Turn your hot water system off if you're going away for an extended period.
- Avoid using small amounts of hot water if cold water will do.
- When replacing your hot water system, purchase an energy-efficient system (such as a solar system with a gas booster, which will cut your hot water bill by about 70%).
- Gas hot water heaters are much more energy efficient than electric water heaters. (A highly efficient gas system will save you hundreds of dollars in energy bills and reduce greenhouse emissions by two-thirds.)

Greenhouse gas emissions from electric hot water



What can I do at home? *Continued*

There are a range of minor changes you can make at home that will reduce your energy bill and cut greenhouse gas emissions. So here are some tips for making your house more energy efficient.

Lighting

Take action now:

- Turn off unnecessary lights.
- Use daylight where possible, although you should avoid having exposed windows in extreme weather.
- Use the lowest wattage needed to light an area.
- Replace incandescent lights with low-energy compact fluorescent lights.
- Keep lights clean. Dusty or dirty fittings can reduce light output by up to 50%.
- Install dimmer controls that reduce light output (and greenhouse emissions).
- Avoid installing or using down-lights (it requires too many to light a room).

Selecting an energy-efficient light globe

The cost of running a light is directly related to the wattage of the globe plus any associated ballast or transformer. The higher the wattage, the higher the running cost.

Fluorescent lamps are the most energy efficient form of lighting for households. A 15 watt compact fluorescent light emits as much light as a 60 watt incandescent light. That equates to a 75% power saving – without any reduction in light output.

In order of energy efficiency the best light globes to use are:

Best

1. Fluorescent tube.
2. Compact fluorescent light.
3. Low voltage halogen (down light).
4. Halogen lamp.
5. Incandescent bulb.

Worst

Appliances

Take action now:

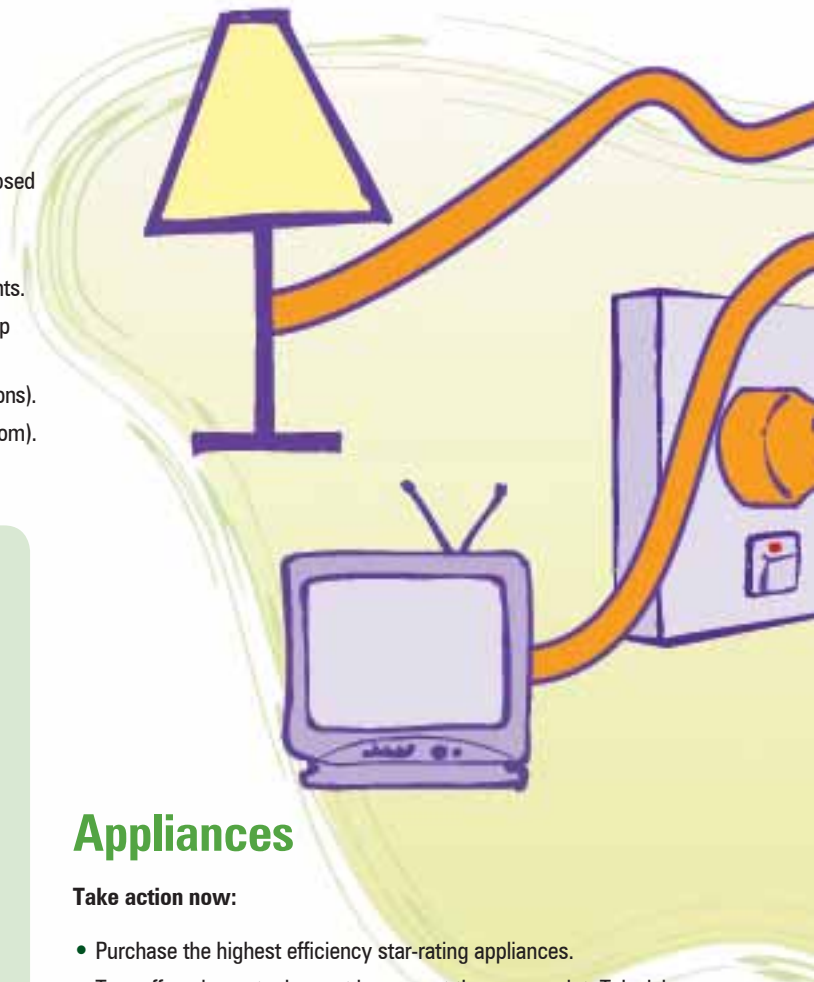
- Purchase the highest efficiency star-rating appliances.
- Turn off equipment when not in use – at the powerpoint. Televisions, VCRs and stereos all use electricity when in “standby” mode.
- Only run your dishwasher when it’s fully loaded.

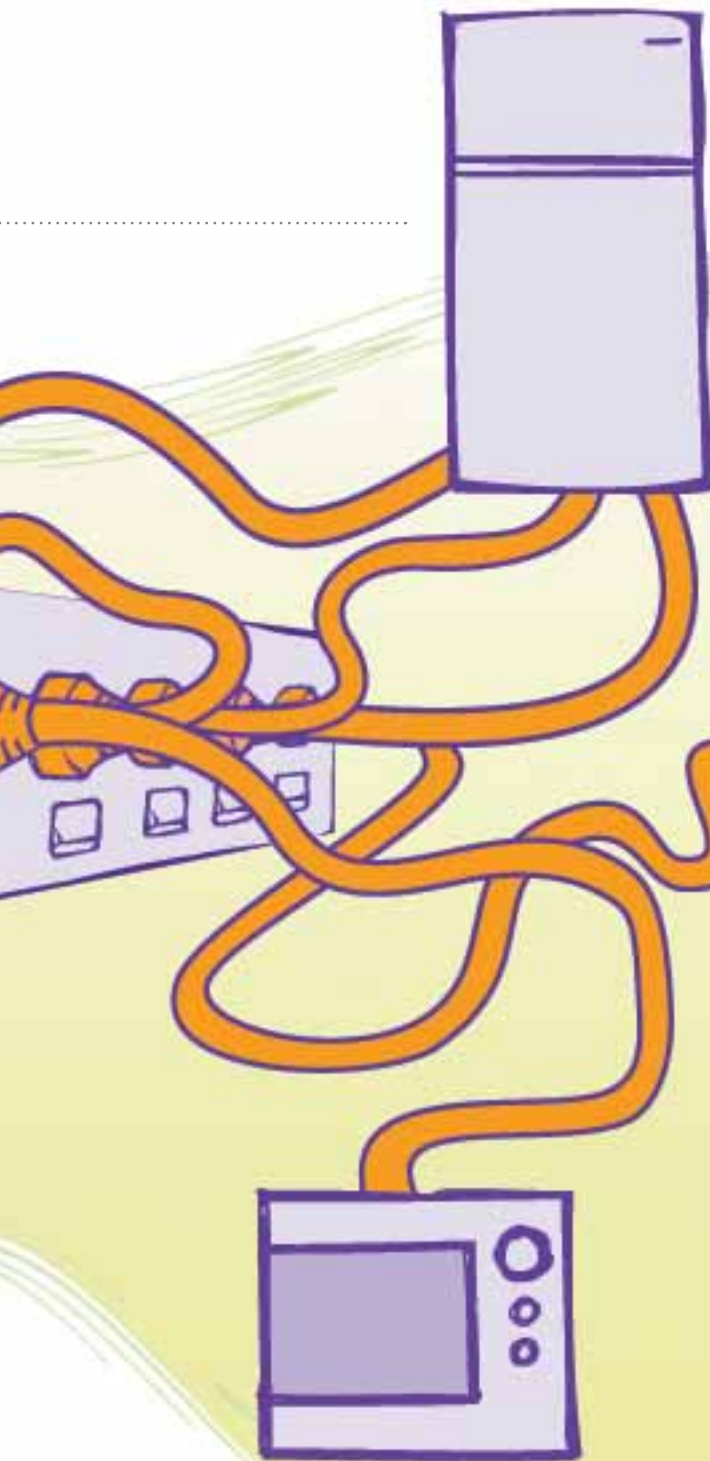
Give us your feedback

An important part of the Footprint program will be to provide all Australia Post facility managers with an energy audit kit that they will use to identify opportunities for reducing energy usage at our facilities.

So if you’ve got an idea for reducing energy consumption at your workplace, please advise your manager. We will investigate any idea that is practical and cost effective.

If you have any comments on this publication or ideas on how Australia Post can cut energy consumption (i.e. ideas beyond your facility), please e-mail us at: sustainability@auspost.com.au





Fridges & freezers

Take action now:

- Place your fridge and freezer in a cool location.
- Ensure there is good air circulation around the coils at the back of the fridge.
- Set the fridge temperature to 5°C. This will keep food safe without unnecessary cooling.
- Your fridge motor shouldn't need to run all the time – if it is, get the fridge repaired.
- Make sure your fridge door is airtight. Test the door by closing it over a piece of paper. If you can pull the paper out easily, the hinge may need to be adjusted or the seal replaced.

Clothes washing & drying

Take action now:

- Wash clothes in cold water.
- Choose a washing machine that uses energy, water and detergent efficiently.
- When selecting a washing machine, look for a size that suits your household.
- Only wash clothes when you have a full load.
- Dry your clothes using the sun, rather than a clothes dryer.

Cooking

Take action now:

- Microwave ovens, electric frying pans or pressure cookers are much more energy efficient than a conventional oven. A fan-forced oven uses less energy than a conventional oven and baking time is substantially reduced.
- Put lids on pots and pans and make sure they're the right size for the burners. Foods will cook faster and use less energy.
- Thaw foods and cut vegetables into small pieces before cooking. They'll take less time to cook.

FACT:

Washing clothes with hot water generates 15 times more greenhouse gases than washing them with cold water. So using cold water is always better for the environment.

Footprint



Looking for more information?

WWW.

If you want to know more about saving energy at home there are some great Australian websites where you can learn about reducing your environmental impact. Check out the following sites.

<http://saver.energyaustralia.com.au/start.html>

The Energy Australia website has an excellent online calculator where you can work out your home's energy use and greenhouse gas emissions. This site will also give you an action plan for cutting your household energy bill.

www.yourhome.gov.au

This is a great website for people who are designing, building or renovating their home and who want to have a comfortable home that costs less to run. Refer to the "consumer guide", "technical manual" and "tools".

Some of the information in this edition of *Footprint* was sourced from the Australian Greenhouse Office and the Victorian Department of Sustainability and Environment.

www.greenhouse.gov.au/gwci/calculator.html

Use this site if you would like to calculate your own greenhouse emissions. If you want more information about ways you can reduce greenhouse gas emissions, refer to the publication *Global Warming: Cool It!* on this website.

www.travelsmart.gov.au

This website contains information on environmentally friendly transport options.

www.greenvehicleguide.gov.au

This site contains advice on greener motoring, including details about the efficiency and greenhouse emissions of particular cars.

Competition Win a new fridge!

To celebrate the launch of Footprint, we're giving you the chance to win a fridge (with 4.5-star energy efficiency rating) which will help you cut your household energy consumption.

To be in the running, all you have to do is correctly answer the following three questions.

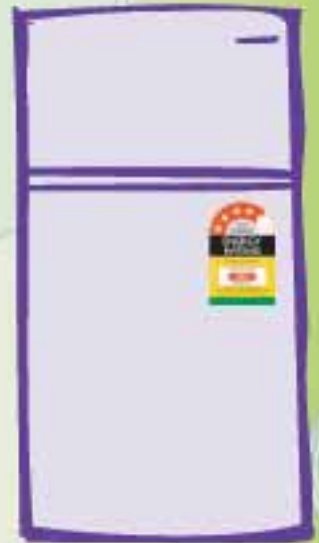
1. What was the percentage increase in Australia Post's greenhouse gas emissions between the years 1990 and 2005?
2. In a typical Australian household, what is the percentage of greenhouse gases caused by transport?
3. What type of light globe/lamp provides the most energy efficient form of lighting?

Hint: The answers to all three questions are contained in this edition of Footprint.

Write your answers on the back of an envelope – along with your name, address and home phone number – and send your entry (by 4 May 2007) to:

FOOTPRINT COMPETITION

c/o The Environment Manager
GPO Box 1777, MELBOURNE VIC 3001



TERMS AND CONDITIONS: 1. Information on prizes and how to enter form part of these conditions of entry. 2. The Promoter is Australian Postal Corporation (ABN 28864970579), trading as Australia Post, 20/321 Exhibition St, Melbourne VIC 3000. 3. The competition commences on Tuesday 10 April 2007 and entries must be received by last mail 5 pm AEST on Friday 4 May 2007. 4. The competition is open to all Australia Post staff, licensees and contractors who are aged 18 years or over and who fulfil the entry requirements. No responsibility accepted for lost, late, illegible or misdirected entries. 5. To enter the competition, participants need to write the correct answers to the question provided on the back of an envelope, along with their name, address, daytime phone number and work centre and send it to: "Footprint Competition" c/o The Environment Manager, GPO Box 1777 Melbourne Vic 3001 during the promotional period. Entries in Australia Post "official mail" envelopes, or internal mail, will not be accepted. 6. The first correct entry randomly drawn will receive a Samsung 385L Platinum Frost Free Fridge (SR386NTS) valued at \$999 (RRP). The total value of all prizes is \$999. 7. The prize draw will take place at 11 a.m. AEST on Monday 7 May 2007 at Australia Post Headquarters, L18/321 Exhibition St, Melbourne VIC 3000. 8. The winner will be notified by telephone and letter within 2 days. The winner's name will be published in the May 2007 edition of *Footprint*, which will be available on 21 May 2007. 9. The Promoter may conduct such further draws as are necessary if the major prize remains unclaimed three months after the draw at 11am AEST on 7 August 2007 at Australia Post Headquarters, L18/321 Exhibition St, Melbourne VIC 3000, subject to any direction given under Regulation 37 of the Lottery and Gaming Regulations 1993 (SA). 10. The Promoter's decision is final and no correspondence will be entered into. Prizes are not transferable or exchangeable and are not redeemable for cash. All entries become the property of the Promoter. 11. The Promoter, its contractors, employees and agents, shall not be liable for any claims, losses, damages, injuries, costs and expenses suffered (including indirect or consequential) as a result or in any way connected with the competition and or its prizes, except for liability that cannot be excluded by law. 12. Entry into the competition shall be deemed acceptance of the above conditions of entry and is deemed approval to use the winners' names and photography for publicity purposes.

Authorised under NSW permit number TPL07/02660, ACT permit number TP07/00592, SA permit number T07/612.

PRIVACY NOTICE: The Promoter collects personal information for the purpose of administering this competition. If personal information is not given, you cannot be entered into the competition. Entrants may request access to their personal information while it is stored by the Promoter and the Promoter will assess all requests in accordance with law. If access to personal information is denied, reasons will be provided.

