

EXAMINER NEWSPAPER

SPECIAL LIFTOFF JUNE 29TH 2006



The Green House – Sustainable housing on a budget!

The Green House will change the way you think about your house and your role in reducing the Greenhouse Effect and Global Warming.

The Cities of Armadale and Gosnells and Serpentine Jarrahdale Shire are working together as the South East Regional Energy Group (SEREG) to promote energy and resource efficiency and greenhouse gas reduction. As part of the *switch your thinking!* programme SEREG has just completed an exciting and innovative project. *The Green House* is a retrofitted existing dwelling in Maddington and is a showcase of sustainability, especially in energy efficiency, but also in water and waste efficiency.

There has been a lot of attention and publicity given to energy efficiency in new homes, but little to renovations, which comprise more than 80% of building activity in Australia. SEREG decided that it was time something was done to help people who wanted to invest

Opens this
Saturday
1 July at
11am!

in energy and water efficiency when they renovated their existing home.

The Green House, located at 23 Willow Way Maddington, is a 1970s double brick and tile home representative of many in the region. The house was built with little consideration of environmental performance. As a result, the house was uncomfortably hot in summer and unbearably cold in winter. Electricity and gas use and costs to heat and cool the house were a drain on the household budget, but also cost the Earth through greenhouse gas emissions.

The Green House has been retrofitted specifically for this project by local contractors and, wherever possible, with local products to demonstrate that sustainable energy

switch your thinking!

a small change can make a big difference.



and water efficient house retrofits are easy, affordable, and attractive.

SEREG Chair Councillor Pat Hart explains "We hope that the successful retrofitting of an older, existing home will show the local community that the environmental and financial performance of existing residential dwellings can be substantially and cost-effectively improved by addressing a few simple areas".

"Retrofitting of *The Green House*

has been kept mainstream and practical, to be easily replicated with the emphasis on the promotion and display of the energy and water efficient features."

The orientation of the block and the sun's seasonal impact on the house, and the existing layout of the house have been factored into the retrofit, with a focus on improving comfort levels and reducing the need for additional heating and cooling. The house also has a strong focus on water efficiency. *The Green House* demonstrates a variety of readily available energy and water saving technologies, from compact fluorescent down lights to grey-water recycling and sub-strata irrigation.

The Green House will be open to the public for twelve to eighteen months as an educational tool and source of information on affordable sustainable retrofitting.

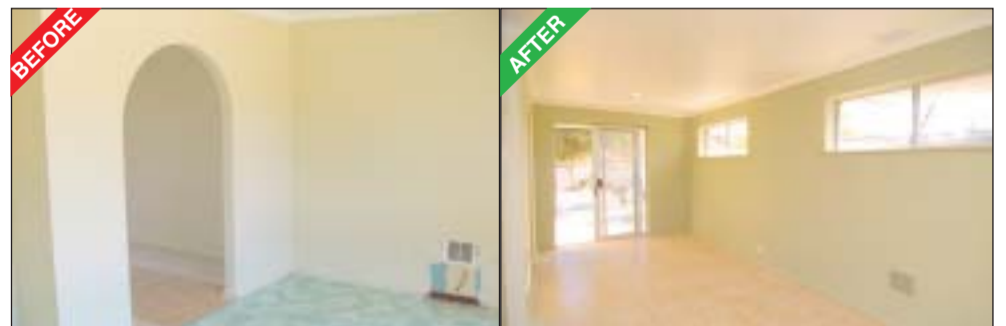
Gosnells Mayor Cr Pat Morris said "The City of Gosnells is excited to be hosting this excellent *switch your thinking!* initiative, the first of its kind in the Perth metropolitan area".

"*The Green House* demonstrates that any style of home, regardless of age and location, can be successfully retrofitted with energy efficient and waterwise features – which in turn will help reduce greenhouse gas emissions from household energy use", she added.

The Green House will be officially opened by the Mayor of Gosnells on Saturday 1 July 2006 at 11am. There will be a free sausage sizzle for visitors, and free giveaways for both adults and kids. Visitors to *The Green House* on the opening day will have the opportunity to win a \$1000 insulation voucher from programme sponsor Cool or Cosy.

The Green House will be open to the public on Saturdays from 11am – 4pm and Wednesdays from 1pm – 5pm. Viewing at other times can be arranged by contacting the Regional Greenhouse Coordinator, Mr Jason Menzies on 9391 6032.

For more information on *The Green House* or any other *switch your thinking!* initiative visit www.switchyourthinking.com



PROUDLY SUPPORTED BY:



Maddington's Sustainably Retrofitted Home: The Green House vs The Greenhouse Effect

The Greenhouse Effect and Global Climate Change present the greatest ever threat to mankind and civilisation as we know it. We've all heard the mantra "think globally, act locally", but most of us don't know how we can do something in our lives.

The South East Regional Energy Group (SEREG) was formed to help the communities of the Cities of Gosnells and Armadale, and Serpentine Jarrahdale Shire reduce their energy consumption and greenhouse gas emissions.

With *switch your thinking!* programme partners the Sustainable Energy Development Office, Department of Housing and Works and the Maddington Kenwick Sustainable Communities Partnership, the SEREG has renovated a 1970s Homeswest house in Maddington. The house will be open to the public to display sustainable development in a real sense.

The Green House was originally built in the late 1970s. Double brick and tile, the house is typical of many in the region and, indeed, throughout Western Australia - uncomfortably hot in summer and un-

ably cold in winter. It takes a lot of artificial heating and cooling, and those power bills and greenhouse gas emissions just keep growing. Wouldn't it be great to be able to do something about it?

The Green House has been renovated to demonstrate how similar style older homes can be made more energy efficient and water-wise, which in turn will lead to financial savings and help in the global effort to reduced greenhouse gas emissions.

The Green House, the first of its kind in the Perth metropolitan region will be officially opened to the public this Saturday 1 July at 11am. The demonstration home will display simple, cost-effective solutions to household climate control, as well as water efficiency and waste management.

A few structural modifications have been made to The Green House to improve its environmental performance. New windows in the north facing wall of the lounge room, and bi-fold doors in the living room radically improve the house's performance, providing natural ventilation, lighting and winter warming from the sun. These simple renovations reduce the need for costly artificial heating, cooling and lighting.

As you would expect, The Green House also features a host of sustainable products



that will help the average householder save energy, water and money - most of them are inexpensive and easy to use:

A Solahart solar hot water system supplies all hot water at The Green House. Water consumption is almost halved by AAA showerhead and tap aerators, helping save both water and energy. Most people don't realise it, but a lot of energy goes into producing our high quality drinking water.

High energy rated electrical appliances are also demonstrated at the home such as the 5-star rated Westinghouse fridge, the 5.8 star rated low NOX gas heater, and the high energy rated front loader washing machine.

The ceiling and western-wall have been insulated to R3.0 value with Cool or Cosy cellulose fibre, which is made out of recycled newspaper. Special insulating paint has also been used on north and west facing walls.

Pelmetted curtains have been installed throughout the house to reduce heat transfer through windows, keeping the house cooler in summer and warmer in winter.

Window tinting has been used on eastern windows to reduce morning glare and heat transfer in summer. A "whirlybird" extractor on the roof exhausts hot air in summer to cool the roof space.

The bathroom and second bedroom, both located on the southern side of the house, have had skylights installed to provide natural light. The skylight in the bedroom is louvered allowing the room to be darkened as required.



Energy saving compact fluorescent light globes (CFLs) are used throughout the house instead of ordinary incandescent light globes. CFLs use only one-fifth of the energy of normal light globes and last 8-10 times longer. Each CFL can save up to \$100 over its lifetime.

Fanlights have been installed in the main bedroom and family room. Fans are a very economical way of improving ventilation and comfort levels. They can cool in summer, and be turned on to a low speed reverse-spin in winter to help circulate hot air that has risen to the ceiling.



Project coordinator Jason Menzies, SEREG chair Cr Pat Hart and Josh Byrne from ABC's Gardening Australia.

And it's not only the house that showcases energy efficient and waterwise technology - the gardens are also full of great ideas. Josh Byrne Smart Gardens have created a low-cost, water efficient and productive garden. The house's thermal performance is improved through strategic summer shading, and winter warming, whilst costs were kept low by reusing available materials.

Deciduous trees and vines have been strategically planted to provide shade in summer whilst allowing in the warming winter sun, helping to reduce the need for artificial heating and cooling.

The gardens were designed to require minimal irrigation and boast a wide array of attractive native plants. Those areas of the garden that do require some form of watering, such as the vegetable beds and fruit trees,

are watered by sub-surface irrigation. Drip irrigation delivers water directly to plants roots where it's needed. This significantly reduces water losses through evaporation and overspray, and also leads to fewer weeds and fungal diseases.

The irrigation control system has been conveniently installed outside the laundry door for easy access, allowing the householder to easily turn off the system in the event of rain.

Using newer technology, parts of the garden are also irrigated using grey water. A simple, easy to install Gflow greywater system has been

drinking water for irrigation.

The Green House also uses rainwater for toilet flushing. A combination of 2500 litre rainwater tank and Davey Rainbank pump system supplies rainwater to the toilet cistern, saving thousands of litres of drinking water per year. The automated system switches to mains water if the tank runs dry.

Other waterwise technology on display includes a AAAAA front loader washing machine, a AAA showerhead, tap aerators and double kitchen sink.

The Green House also promotes household waste reduction and demonstrates simple on-site waste management using composters and worm farms for organic material to improve the garden, as well as the recycling of other products.

The Green House Project Coordinator, Mr Jason Menzies, will be available to give advice and information to people wishing to renovate existing, or build new, homes that perform better environmentally and financially.

The Green House is also available to school groups undertaking experiments associated with energy efficiency and other interested community groups. Inspections can be arranged by contacting Mr Menzies on 0432 370 671, or alternatively the City of Gosnells on 9391 3222.



The Green House - Sustainable housing on a budget! OPENS THIS SATURDAY (1/7/06) at 11.00am!

23 Willow Way Maddington

Check out our energy, water and waste saving devices
Save \$\$\$ on your energy and water bills!

FREE sausage sizzle for all visitors

+

FREE giveaways for the kids

+

Go in the draw to win \$1000 worth of Cool or Cosy insulation!

Opening Times:

Saturday: 11.00am - 4.00pm

Wednesday: 1.00pm - 5.00pm

Other times can be arranged by appointment

Phone 9391 6032

switch
your thinking!

a small change can make a big difference.



Did you know that every second ...

- 390,000 cubic meters of CO₂ are emitted.
- 1,629 cubic meters of glaciers in Greenland melt.
- 710 tonnes of oxygen disappears from the atmosphere.
- 2,300 square meters of arable land disappear.
- 3 cattle, 7 pigs and 1,100 chickens are consumed, totaling the meat production of approx 6.9 tonnes.
- 5,100 square meters of natural forest disappear.
- 1.3 vehicles and 4.2 televisions are produced.
- 532 people go to McDonald's and consume more than 500 hamburgers.
- Population increases by 2.4 persons.

Prediction of global warming by the Earth Simulator

Temperature increase compared to pre-industrial level	Year predicted	Environmental impacts to be expected
1.5 degrees C	2016	Trigger the melting of Greenland ice sheet, etc
2 degrees C	2028	1.0 - 2.8 billions people would suffer from water shortage, etc
3 degrees C	2052	Collapse of climate, such as unstabilisation of West Antarctic ice sheet, etc
4 degrees C	2070	Collapse of Australian Agriculture etc

Climate Change +2 degrees C (ed. by R. Yamamoto, Diamond Co., 2006).
Avoiding Dangerous Climate Change (2006).

The Greenhouse Effect and Global Warming

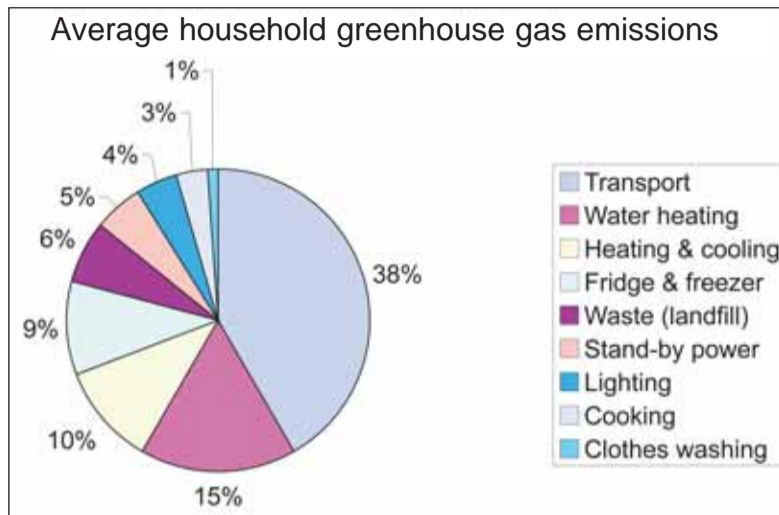
There's a little bit of confusion about the Greenhouse Effect. Let's try to clear it up.

Friend: The Earth relies on the Greenhouse Effect to maintain temperature that allows life, as we know it, to survive. Gases in the Earth's atmosphere act like a blanket, trapping solar radiation and keeping the temperature about 30 degrees warmer than it would otherwise be. Without the Greenhouse Effect, our planet would be a very inhospitable place, and life would be very different to the one we currently know and enjoy.

Enemy: The enhanced Greenhouse Effect has been creeping up on us since the industrial revolution, and causes global warming through an increase in greenhouse gases in the Earth's atmosphere. There's still some debate about exactly how much of the additional greenhouse gases are due to human activity, but there is almost universal agreement that global warming is happening, and will cause significant changes to the Earth's climate.

How Do We Generate Greenhouse Gases?

- Burning fossil fuels – coal, oil or gas
- Clearing land
- Producing waste – garbage and sewage
- Aspects of farming – using fertilisers, raising cattle and sheep



How Do Households Contribute To Global Warming?

Australian households generate almost one-fifth of Australia's greenhouse gases – more than 10 tonnes per household per year. We hold the unenviable record of contributing more greenhouse gases to the atmosphere per person than any other nation on Earth.

We do this through everyday activities such as transport, household energy use and the decay of household waste in landfills. Even using water contributes to greenhouse emissions due to the energy needed to extract, process and pump it the long distances from the reservoirs to our homes.

Why Care?

If people around the world do not switch their thinking and change their energy use behaviour to

reduce greenhouse gas emissions and combat global warming, scientists have predicted:

Temperature increases - an increase in average temperatures of around 20°C by 2030, and 50°C by 2100, with a dramatic increase in the frequency of frosts and very hot days, especially in inland areas.



Change in rainfall patterns - predictions vary from a slight increase in rainfall to a drop of 20% by 2030, and 60% by 2070. What has actually happened since 1975 to date has been a consistent drop in average rainfall in the south-west of WA of 20%. This will drastically change primary production patterns and affect all native vegetation.

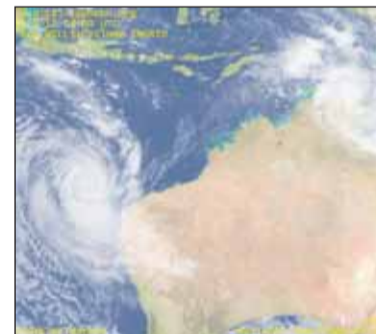
Extinction of Flora and Fauna - there are predictions for wide-

spread extinctions of many species by 2030, including wattles, dryandra, frogs, and marsupials such as the Black Footed Wallaby. Predictions are that the Chuditch, our largest marsupial hunter, and the Numbat, will disappear from the Darling Range.

Disease Implications - the Health Department has advised that subtropical diseases, including some encephalitis and meningitis viruses and their mosquito and bird carriers, are moving further south!

Changes to Horticulture - radical changes to primary industry will follow rainfall decline. Decreasing rainfall and increasing frost frequency will have a serious impact. Much of our current broad acre agricultural area will become less productive, and may eventually be useless for that purpose.

Cyclones, Storms and Fires - cyclones are predicted to form further south and to travel further south than they currently do. Complicated changes in weather patterns, such as more severe droughts and floods, and higher rainfall intensity.



What To Do?

Action is needed, and we're all part of the solution. We can all play an important role and *switch our thinking* to make a difference.

Start by taking a look at the main offenders in your life – where are the biggest amounts of greenhouse gas emissions produced?

The biggest offender is the family car. It produces an average 6 tonnes of greenhouse gases for every 20,000 km travelled. In the home the main culprits are the hot water system, space heating and cooling, and refrigeration.

Don't forget that each one of us is actually paying cold hard cash to change the Earth's climate (e.g. electricity and gas bills, petrol etc). If only we could reduce the amount we spend!

Well, the good news is that it is possible, and it's not hard! Visit *The Green House* for simple ideas to get you started or visit www.switchyourthinking.com and start making the switch!

CLIMATE PROTECTION - WE ARE DOING IT!

Hot Energy Smart tips to \$ave Money & Reduce Greenhouse Gas Emissions

AREAS ENERGY AND MONEY ARE WASTED	MINIMAL INVESTMENT	MODERATE INVESTMENT	HIGHER INVESTMENT
Hot Water Heating Energy used for heating a family's water can generate about 2 tonnes of greenhouse gas and cost up to \$400/year.	<ul style="list-style-type: none"> ✓ Fix dripping taps ✓ Turn off hot water system if house will be unoccupied 3 days or more ✓ Wash clothes in cold water ✓ Lower hot water system (HWS) thermostat temperature 	<ul style="list-style-type: none"> ✓ Insulate exposed hot water pipes (use split old reticulation poly pipe) ✓ Add extra insulation around HWS ✓ Replace showerheads with AAA water efficient showerheads to save water and energy 	<ul style="list-style-type: none"> ✓ Install a solar HWS - gas boosted ✓ Choose an appropriately sized system ✓ Check the energy rating of new systems and invest in the higher star rating
Home Heating Home heating and cooling costs about a quarter of your energy bill and often generates a tonne or more of greenhouse gas per year.	<ul style="list-style-type: none"> ✓ Open blinds & curtains to north facing windows in winter ✓ Seal draughts around doors ✓ Try warmer clothes instead of extra heating ✓ Keep doors to unused rooms closed 	<ul style="list-style-type: none"> ✓ Install close fitting curtains ✓ Build pelmets over windows to enclose curtains ✓ Install ceiling fans to circulate warm air 	<ul style="list-style-type: none"> ✓ Insulate your ceiling to R=2.5 min. rating especially over living areas ✓ Place carpets or rugs over wooden or tiled floors ✓ Only purchase high energy rating heaters
Home Cooling Heating and cooling your home costs you \$100's each year - look after your comfort and your wallet!	<ul style="list-style-type: none"> ✓ Open windows and doors to catch cool breezes at night ✓ Keep doors to unused rooms closed ✓ Re-arrange seats and beds away from external walls 	<ul style="list-style-type: none"> ✓ Install ceiling fans ✓ Shade north facing walls with deciduous trees or climbers ✓ Seal door & window air leaks ✓ Paint dark aluminium window frames a light colour 	<ul style="list-style-type: none"> ✓ Insulate ceilings and walls ✓ Shade north facing windows eg awnings, patio or reflective blinds ✓ Select light coloured roofing ✓ Only purchase high energy rating coolers
Refrigeration & Freezer Accounts for 16% of energy use in WA. A 2 door fridge may produce 1.5 tonnes of greenhouse gas and cost \$150 per year to run.	<ul style="list-style-type: none"> ✓ Ensure the rear of your fridge or freezer is well ventilated ✓ Locate your fridge/freezer away from heaters or external walls ✓ Don't over/under fill - cover liquids & only put in completely cooled foods. 	<ul style="list-style-type: none"> ✓ Clean condenser coils at least once every 2 months ✓ Do not let ice build up more than 6mm thick (manual defrost fridges) ✓ Turn off extra bar/garage fridge until you really need it 	<ul style="list-style-type: none"> ✓ Replaced damaged seals ✓ Purchase an energy efficient fridge
Lighting Generates about 2/3 tonne of greenhouse gases each year, costing about \$80	<ul style="list-style-type: none"> ✓ Turn lights off when leaving a room ✓ Set security light sensitivity correctly ✓ Make maximum use of natural light 	<ul style="list-style-type: none"> ✓ Select bulb wattage to suit the use ✓ Buy energy efficient light bulbs eg compact or standard fluorescents ✓ Use socket timers while away 	<ul style="list-style-type: none"> ✓ Redesign lighting to minimise the number of bulbs ✓ Use light coloured paint on walls and ceilings
Cooking Uses 12% of energy in an average WA home, generating 1.5 tonnes of greenhouse gas & may cost \$150 per year	<ul style="list-style-type: none"> ✓ Cook things at the same time to optimise use of the oven and stove ✓ Thaw food naturally before cooking ✓ Always use lids on pots and pans ✓ Match saucepan to hot plate size 	<ul style="list-style-type: none"> ✓ Use a pressure cooker, toaster etc to minimise use of your stove ✓ Use split saucepans to cook two things at a time on one hot plate 	<ul style="list-style-type: none"> ✓ Buy a microwave oven - effective and cheap for many meals ✓ For new cookers check the energy rating - fan forced ovens are best
Family Transport Passenger vehicles are a major polluter and greenhouse gas source	<ul style="list-style-type: none"> ✓ Walk, cycle or use public transport ✓ Share a ride with someone else ✓ Phone, mail, fax or email instead ✓ Avoid stop/start traffic, rapid takeoffs and sudden stops. 	<ul style="list-style-type: none"> ✓ Do a fuel efficient driving course & save up to 40% on fuel used ✓ Ensure on-time vehicle tune-ups and keep tyres inflated to maximum recommended pressure 	<ul style="list-style-type: none"> ✓ Convert your vehicle to gas ✓ Select a smaller or more efficient model when buying a new car ✓ Relocate closer to work and have enjoy your extra free time

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The Group

The Cities of Armadale and Gosnells and the Serpentine Jarrahdale Shire are working together to develop partnerships with business, industry and residents, to encourage energy efficient and waterwise behaviour, with the goal of reducing regional greenhouse gas emissions. The three member Councils are working together as the South East Regional Energy Group (SEREG).

The SEREG was convened to coordinate the research and implementation of greenhouse reduction measures across the region. Council Officers and Councillor delegates form part of this group, which is serviced by a Regional Greenhouse Coordinator (RGC).

The Brand

The *switch your thinking!* brand was developed to help SEREG Councils deliver 'sustainability' initiatives to their communities under a recognisable and consistent brand.

Adopted for community and local government corporate purposes our brand shows we mean business and will offer increasingly attractive opportunities to business and industry to be publicly associated with climate protection and environmental awareness.

A community survey conducted in September 2005 indicated that 1 in 4 households were familiar with the *switch your thinking!* brand, and knew that it related to energy and resource efficiency, and greenhouse gas reduction.

The Programme

The *switch your thinking!* programme was launched in June 2002 to enable SEREG Councils and their communities to implement measures that will save energy, water and operating costs, and reduce greenhouse gas emissions.

The programme was devised by SEREG as a means of linking seemingly disparate projects and actions under an easily recognisable brand. The programme has been strategically designed to engage the community in participating in achieving our regional emissions reduction target of 15% by the year 2010.

A key feature of *switch your thinking!* to date has been the formation of successful partnerships with state and federal government agencies, funding bodies, and corporate sponsors. Since the programme's inception four years ago, SEREG and its project partners have invested more than half a million dollars in regional actions, helping reduce greenhouse emissions by more than 210,000 tonnes (carbon dioxide equivalent).

SEREG would like to thank the following project partners and sponsors for their support:

Company	Products	Address	Phone
Aalto Colour	Insulation paint	341 Rokeby Road, Subiaco	9388 8060
AB & SA Painting Innovations	Painting services	84 Amethyst Crescent, Armadale	0414 227 791
AK Curtain Shop	Curtains, blinds etc	219 Railway Road, Kelmescott	9390 7222
All West Ceramics	Floor and wall tiles and tiling service	1932 Albany Hwy, Maddington	9452 2999
Armadale Lighting	Security, sensor, fluorescent, and compact fluorescent lights and fans	1/277 Railway Road, Kelmescott	9497 4844
Benara Nurseries	Vines and seedlings	71 Vincent Road, Wanneroo	9405 0000
Boral Concrete - Canning Vale	Concrete		9455 1022
Budget Home Improvements	Rendering and texture applications	Unit 6 / 6 Toorak Road, Armadale	0448 882 818
Callaghan Security Services	Alarms, monitoring, patrols	2075 Albany Hwy, Maddington	9459 0872
City Farmers - Kelmescott	Garden products including manure, minerals, and soil wetting agent	Railway Ave (Cnr Centre Road), Kelmescott	9390 6753
Cool or Cosy	Insulation, window tinting, air-conditioning	113 Garling Street, O'Connor	9338 9000
Earth & Water Pty Ltd	Waterwise garden design and irrigation services	Unit 4 125-129 Welshpool Road, Welshpool	9258 7372
Electrolux Home Products Pty Ltd	Westinghouse refrigerator, oven and rangehood, and 5A front-loader washing machine		1300 363 640
Ellenby Tree Farm	Mature trees	439 Sydney Road, Gnangara	9405 4558
Energy World House Cannington	Solar hot water systems and air-conditioning	1234 Albany Hwy, Cannington	9451 9311
Fridge and Washer City - Cannington	Energy efficient whitegoods and electrical appliances	1139 Albany Hwy, Cannington	9451 9929
General Glass Pty Ltd	Windows	35 Austin Ave, Maddington	9459 1182
Good Sammy Stores - Gosnells	Second hand furniture	2288 Albany Hwy, Gosnells	9398 3952
Herbs R Us	Herbs and vegetables	97 Cedric Street, Stirling	0411 220 348
Homes for Wildlife	Nest boxes		9319 9190
H-R Products	Grey water systems and flow restrictions valves	207 Bannister Road, Canning Vale	9455 1677
Huntingdale Cabinets	Cabinets, benches, vanities etc	10 Bushlark Close, Cardup	0419 195 298
Josh Byrne Smart Gardens	Landscape consultation, design and construction	PO Box 1866, Fremantle	9443 3721
Lovegrove Turf Services Pty Ltd	All types of turf	41 Brentwood Road, Wattle Grove	9453 6222
Mazeggas Mitre 10	Shed, paint and other DIY accessories	70 Gillam Dve, Kelmescott	9495 9111
MulchNet.com	Mulch	tim@mulchnet.com	9244 4519
Netafim (Australia) Pty Ltd	Waterwise Irrigation products - sub-strata irrigation etc	87 Crocker Dve, Malaga	9249 8423
Oakford Native Nursery	Native seedlings and trees	141 King Rd, Oakford	9525 1324
Parkwood Plumbtec	Kitchen sink and bathroom basin	168 Bannister Road, Canning Vale	9455 6433
Rainfill Tanks	Raised garden beds	40 Drake Street, Osborne Park	9444 9388
Re.plants	Grass trees and natives	Chamberlain Street, O'Connor	0408 885 435
Rinnai Australia Pty Ltd	Gas heaters and hot water systems	18 Belgravia Street, Belmont	1300 555 545
RJ Skylights	A wide range of sky lights and whirly birds	9 Burwash Place, Maddington	9493 1826
Soils Ain't Soils	Landscaping mix, compost, soil, sand, mulch etc	Lot 20 Hardey Road East, Forrestfield	9359 1115
Solahart	Solar hot water systems	112 Pilbara St, Welshpool	9351 4600
Solar Dwellings	Solar passive design advice	23 Green St, Mt Hawthorn	9444 4400
The Worm Shed	Wormfarms, worms and castings	3479 Chittering Road, Chittering	9571 8003
Vinyl-Tech Doors	Doors, bathroom vanities etc	15 Stebbing Road, Maddington	9452 1499
West Coast Poly Pty Ltd	Rainwater tanks, rainbank pumps etc	7 Uppsala Place, Canning Vale	9456 5888
West Coast Shade	Shade sails	PO Box 384, South Fremantle	9314 5450

MORE INFORMATION

If you want to know more about choosing energy efficient appliances, keeping your house cool in summer and warm in winter or any other matter relating to home energy use, simply phone the SEDO Home Energy Line on 1300 658 158 or visit the Sustainable Energy Development Office's website at www.sedo.energy.wa.gov.au. Free independent advice that could save you hundreds of dollars.



1300 658 158

