

Sustainable Products and Services Guide

The following is intended as a guide only to sustainable products and services. A product or service listed here is not necessarily SGA endorsement of that product. SGA does not earn advertising revenue or gain any other benefit from a product or service listed here. If your product or service is not listed in this guide and you believe it would be a suitable listing, please contact SGA, phone (03) 9850 8165, email - eclips@sgaonline.org.au for a listing application form.

One of the considerations in determining environmental sustainability is Life Cycle Analysis (LCA).

What is Life Cycle Analysis?

Life cycle analysis is an important tool for both analysing processes to find ways to improve them, and assessing materials and products.

LCA consists of two components: inventory analysis and impact analysis.

Inventory analysis involves summarising the material and energy flows for a defined system. The 'system' is the combination of processes and activities that manufacture a product or achieve an outcome. This typically includes all of the processes associated with the extraction of resources, supply of energy, manufacture of the product, use of the product and disposal and recycling. The resultant inventory is a list of the resources consumed and the emissions associated with the system.

Impact assessment involves interpreting the significance of the resource consumption and emissions determined in the inventory stage. It should be noted that in life cycle assessment, these are restricted to environmental impacts.

The model used for this study examines the material use and emissions in a product, from raw materials through to end of its life. It also assesses the impact of products and processes on the environment - from the extraction of the raw materials, through the manufacturing processes, to disposal by processes such as recycling at the end of a product's useful life.

It does this by examining such things as:

- wastes generated during production
- energy consumed during production and the use of the product; and
- the amount of recycling the product is capable of.

CHEMICALS AND FERTILISERS

Sustainable Gardening Australia in consultation with the University of Melbourne has developed a horticultural chemical rating system to assess the ecological impact of fertilisers, herbicides, pesticides and insecticides. To date SGA has independently rated more than 1300 products. The low environmental impact chemicals are listed on the SGA website: http://www.sqaonline.org.au/info_rated1_chemicals.html

Non chemical based options

Biological control of pests

Eco-organic garden backyard buddies

http://www.ecoorganicgarden.com.au or 1800 634 204 Stock a range of predatory insects for controlling a range of common garden pests.

Bugs for bugs

http://www.bugsforbugs.com.au (07) 4165 4663 or info@bugsforbugs.com.au Stock a range of biological agents

Beneficial Bug Company

http://www.beneficialbugs.com.au supplies Australia-wide

Biological Services

http://www.biologicalservices.com.au/Loxton, SA.Stock a range of predatory insects for controlling a range of common garden pests.

http://www.bioresources.com.au/

Supplier of a range of Trichogramma wasp parasites. QLD

IPM Technologies

http://www.ipmtechnologies.com.au

(03) 9710 1554

Stock a range of biological agents and provide advice on Integrated Pest Management practices

Steam weed control equipment

A.C.A. Engineering and Manufacturing

http://www.acaengineering.com.au
(03) 9335 6855 or sales@acaengineering.com.au
Stock steam control systems

D.J Batchen Pty. Ltd.

http://www.batchen.com.au/index.html

SOILS, MULCHING AND COMPOSTING

Recycled soils, compost and mulch

Outdoor Design Centre

http://www.outdoordesign.com.au/category.act?categoryid=00303 Lists a number of suppliers of soil, sand, mulch around Australia

Landscaping supplies – Australian Business Directory

http://www.atozpages.com.au/contentsatoz/LANDSCAPING%20SUPPLIES.htm Lists a range of suppliers of soils, sand, mulch mainly in Melbourne

ANL (Australian Native Landscapes)

http://www.anlscape.com.au
13 14 58 or mail@anlscape.com.au
Stock range of products derived from green waste

ConCrush

http://www.concrush.com.au/index.asp?pgid=18
Recycled soil, mulch, compost and pavement material
Sales enquiries (02) 4958 3777 or 0401 804 556

Bark King

http://www.barkking.com.au/index.php?location=2&product=26 (03) 9728 5200 Recycled timber mulch

Star Tree Services

http://www.treeservices.com.au/recycled products.php (03) 9437 1745
Recycled timber mulch.

Oz Mulch

http://www.ozmulch.com.au/

A range of soils and mulches in Sydney area and region

Certified Organic

ANL (Australian Native Landscapes)

http://www.anlscape.com.au 13 14 58 or mail@anlscape.com.au

Grow Better

http://www.growbetter.com.au/products organics.php
One range of products is BFA certified organic

Non-traditional options

Décor pebbles

http://www.decorpebble.com.au 03 9888 9888 Stockist of recycled crushed glass

Some of the suppliers of mulches listed above also supply glass products

CONSTRUCTION

Concrete

Independent cement

http://www.independentcement.com.au

1300 137 611

Ecoblend cement range contains a greater amount of slag and flyash reducing energy requirements in manufacture.

Timber

Urban salvage

http://www.urbansalvage.com.au 03 9391 0466 Reclaimed timber decking

The big red shed

http://www.thebigredshed.com.au 07 3279 0911 or sales@thebigredshed.com.au Recycled and reclaimed timber

Australian Ironwood Antique Timbers

http://www.ironwood.com.au
02 9818 1166 or sales@ironwood.com.au
Reclaimed timber decking and structural beams

Replas

http://www.replas.com.au

1800 737 527

Recycled plastic products including edging and decking material

Style Plantation

Composite Decking and Composite Screening are made from non-virgin wood and recycled plastic.

www.styleplantation.com.au

Australian Recycled Timber

http://www.australianrecycledtimber.com/contact_us.php

03 9359 0300

A range of recycled timber including for decking

Timberzoo

http://www.timberzoo.com.au/

52481223

A range of recycled products including for decking

Australian Outback Furniture Pty Ltd

 $\frac{http://www.australianoutbackfurniture.com.au/Karl\%27s\%20Website/recycled \ timber \ settings \\ \underline{.htm}$

0430426199

Range includes decking

Hard surfaces

Alex Fraser Group

http://www.alexfraser.com.au
136 135 or sales@alexfraser.com.au
Recycled asphalt

Bricks and pavers

Permapave

http://permapave.com.au (07) 3284 6841 or info@permapave.com.au Permeable paving

C & M Brick

http://www.cmbrick.com.au(http://www.adbrimasonry.com.au/environmental/default.aspx)03 9375 8500Ecopave permeable paving range

Ecobricks

http://www.ecobricks.com.au 1300 85 37 68 or sales@ecobricks.com.au Recycled brick products

Atlantis Permeable Paving

http://www.atlantiscorp.com.au/applications/landscaping/permeable paving 02 9417 8344
Polypropylene framework for turf and gravel

Choosing Permeable Paving

http://articles.directorym.com.au/Choosing_a_Permeable_Pavement_Victoria-r937809-Victoria.html

Lists contractors and suppliers of a variety of options

Walling/cladding

CSR Hebel

http://www.hebelaustralia.com.au 1300 369 448 or hebelreception@csr.com.au Light weight cement blocks

Eco concepts

http://www.ecoconcepts.com.au 1300 13 14 13 or info@ecoconcepts.com.au Stone wall panels

Plaspanel

Visit the website for stockists: www.plaspanel.com.au

Plaspanel are strong yet lightweight flat panels. The product is manufactured from recycled plastic waste in high-density polyethylene (HDPE) and can itself be recycled.

ThermaWallPlus

http://www.thermawallplus.com.au/

03 9318 4422

A new generation external panel technology that combines exterior cladding with insulation

Retaining Walls

Ecoflex Australia Pty Ltd

20 Kalaroo Road, Redhead, NSW 2290 Phone: (02) 4940 0178 Fax: (02) 4940 0137

Website: http://www.ecoflex.com.au

The Ecoflex product range is a technology that converts waste tyres into building products. The E Wall can be used in the construction of both gravity and reinforced soil retaining walls.

Facade Retaining Systems

Unit 6, 723 The Horsley Drive Smithfield NSW 2164 Tel (02) 9604 5754 Fax (02) 6904 4415 The BRAACE systems used Hebel panels

Gravels, sands and raw materials

Alex Fraser Group

http://www.alexfraser.com.au
136 135 or sales@alexfraser.com.au
Recycled crushed concrete and bricks

Soil stabilisation

Sure Gro

www.suregro.com
03 9558 1060 or sales@suregro.com
Erosion control systems

Geofabrics Australasia

www.geofabrics.com.au Erosion control systems

Atlantis Water Management

www.atlantiscorp.com.au
02 9417 8344 or info@atlantiscorp.com.au
Erosion control systems

Aussieweb list of local products

http://www.aussieweb.com.au/directory/category.aspx?cid=4155#7061 Erosion control systems

Landplan Engineering Supplies (includes Treemax)

http://www.landplan.com.au/

A range of landscaping supplies for erosion control, tree planting etc

IRRIGATION

Rainwater

There is a considerable variety of rainwater tanks, made from a variety of materials and in a variety of sizes. You may wish to consider the following lifecycle analysis study undertaken by the Centre for Sustainable Technology at the University of Newcastle, presents a comparison based on Life Cycle Analysis (LCA) of the three types of rain water tanks - plastic, steel, and concrete. Bearing in mind that the study is found on the Bluescope Steel website, the study is reported to have been independent.

http://www.bluescopesteel.com.au/index.cfm?objectID=B303F6BA-88F6-475D-AEE714D5A6DE2644

Based on this LCA study the following conclusions could be made:

- Rain water tanks made from AQUAPLATE® steel have the lowest overall environmental impact.
- Compared to concrete and HDPE rain water tanks, AQUAPLATE® steel has the lowest embodied energy, GGE and SOx emissons.
- Water tanks made from both AQUAPLATE® steel and HDPE performed similarly in terms of water and NOx environmental burdens, outperforming concrete tanks.
- Compared to a tank made from AQUAPLATE® steel, there is 50% more steel in a concrete tank as part of the structural reinforcement.
- The annual environmental burden of a water tank made from AQUAPLATE® steel is equivalent to one 100W light bulb switched on for approximately one week.

Greywater systems

Enviro Friendly Products

http://www.enviro-friendly.com/greywater-systems-australia.shtml

Provides a list of products for tanks, grey water recycling etc plus fact sheets.

Irrigation Warehouse Group

http://www.irrigationwarehouse.com.au/category255 1.htm http://www.irrigationwarehouse.com.au/category282 1.htm

Stocks EcoCare and a range of other products

Infolink

http://www.infolink.com.au/t/Greywater-Systems

Provides a list of products and companies

Low precipitation rate irrigation

There is a range of low precipitation rate irrigation systems available. Most irrigation suppliers will stock these products.

Fact sheet

 $\underline{\text{http://209.85.173.132/search?q=cache:eiTAolclBUsJ:www.thinkwater.act.gov.au/more_inform_ation/documents/F00553D-}$

<u>DripIrrigationFactSheet.pdf+drip+irrigation+efficient&hl=en&ct=clnk&cd=1&gl=au</u>

An informative fact sheet

KISSS Irrigation

http://www.kisss.net.au

1300 761 781 or info@kisss.com.au

Capillary irrigation system claims to use 60% less water than regular drip irrigation

Netafim Australia

http://www.netafim.com.au

(03) 9369 8777

Manufactures of wide range of drip irrigation products

iCAD Irrigation Design Services

http://www.icadirrigation.com.au Located in Bentleigh, Victoria Phone 0406 320 357

GARDEN ORNAMENTATION

Pots and garden features

The Sustainable Gardening Australia contains a guide to selecting the least environmentally damaging pots. View http://www.sgaonline.org.au/info pots.html for more information.

Recycled garden art is available from a number of artists. Metal, wood, glass, ceramic and plastic are all used in the creation of these pieces. Many artists will also create works from these products if requested.

Outdoor furniture

Australian Wood Creations

(03) 9775 0174 or scutters@primus.com.au

Outdoor furniture created from wood salvaged from urban tree lopping

Overboard Designs

http://www.overboard.com.au/

(03) 5984 2055 or greatfurniture@overboard.com.au

Outdoor tables and furniture created from reclaimed timber

Australian Outback Furniture Pty Ltd

http://www.australianoutbackfurniture.com.au/Karl%27s%20Website/recycled_timber_settings_htm

Range includes outdoor settings

Replas

http://www.replas.com.au/prod misc.shtml

1800737527

Also makes planks and a range of other products out of recycled plastic

Recycled Plastic Products

Repeat Plastics

www.replas.com.au 1800 737 527

Victorian representative: Peter Patterson Email: peter@repeatproducts.com.au

Plastic Recyclers Australia Pty Ltd

www.plasticrecyclers.com.au

67 Payneham Road College Park SA 5069

Phone (08) 8362 4887 Fax (08) 8362 7271 Email admin@plasticrecyclers.com.au

Recycled Plastic Technology (RPT) Pty. Ltd

http://www.rptgreenpipe.com/

Pipes, Pipe Locks, Slidegates, Fittings, Headwalls, Flaps & Chains, Culverts / Crossings, Stormwater / Drainage Products

Equipment

Low emission garden equipment is being introduced to the Australian market. Most major manufacturers now produce their version of low emission and more fuel efficient engines.

Machinery that exhibits these features should of course be selected when current machinery needs to be replaced.

The following article provides useful background information:

http://209.85.173.132/search?q=cache:DOx376BbjAlJ:www.environment.gov.au/atmosphere/airquality/publications/pubs/outdoor-garden-

equipment.pdf+low+emission+garden+equipment&hl=en&ct=clnk&cd=1&gl=au

Paints and sealers

There is a selection of paints and sealers that are less toxic to both humans and the environment. Many paint suppliers now carry a range of low VOC paints.

The natural paint place

http://www.thenaturalpaintplace.com.au/

(02) 9519 0433 or sales@thenaturalpaintplace.com.au

Plant and natural mineral based paints, varnishes, strippers and cleaners.

Livos Australia

http://www.livos.com.au

(03) 9779 3405 or info@livos.com.au

Petrochemical free paints and applications

Murobond

http://www.murobond.com.au/about.html

(03) 9427 9524 or info@murobond.com.au

High Quality water-based paints. The company implements sustainable manufacturing processes where possible.

Bio Products Australia

http://www.bioproducts.com.au/About.htm

(08) 83912499 or info@bioproducts.com.au

SERVICES

Recycling/Green waste collection

http://www.recyclingnearyou.com.au/

This site by Planet Ark allows you to search for the nearest recycling centre Most city/shire councils have their own waste management services

Southern Cross Metal Recyclers

http://www.southerncrossmetalrecyclers.com.au (03) 9397-4358 or robuck@bigpond.com Scrap metal recyclers

Alex Fraser Group

http://www.alexfraser.com.au/recyclebin.html 136 135 or sales@alexfraser.com.au Bin hire sorting and recycling

Hazardous waste collection/refuse

http://www.recyclingnearyou.com.au

This site by Planet Ark allows you to search for the nearest hazardous waste collection points

For larger quantities and higher risk waste, contact a waste management service provider.