Tyre Recycling

TyreStewardship AUSTRALIA

About Tyres

Tyres on cars, buses, trucks and heavy equipment literally keep us moving and, when in good shape, help ensure the safety and comfort of vehicles. However, the equivalent of 56 million car tyres reach end-of-life each year in Australia. Although they may look quite simple the average passenger car tyre is made up of around 1.5kg of steel, 0.5kg of textiles and 7 kg of rubber.

Tyres present a significant waste issue in Australia. Surprisingly, no national database of stockpiles exists today. Illegal dumping, burning and direct incineration of tyres also presents issues. Less than 10 per cent are recycled in Australia. One of the roles of Tyre Stewardship Australia, the tyre industry's official product stewardship scheme, will be to establish a map of existing volumes.

If end-of-life tyres are not managed properly they create a number of issues, including:

- The release of toxic chemicals if ignited,
- The taking up valuable landfill space,
- Providing breeding grounds for mosquitoes and other vermin, and
- The cost of monitoring and removal.

Tyres are a significant waste issue
Image courtesy of Stoonn / FreeDigitalPhotos.net

Recycling Process

There are various recycling processes that end-of-life tyres can be put through. Initially they are cut into smaller pieces to make transport and handling safer and easier. Further processing is used to separate the rubber, textile and steel. The remaining rubber is crumbed (or granulated) and made ready for re-use.

Tyres and their component materials can be used to make a wide array of new products including:

- rubber products such as soft fall surfaces, artificial turf for sports fields, rubber matting and conveyer belts,
- road construction and surfacing,
- as an alternative fuel source for producers of energy and cement, and
- green steel, developed by SMaRT UNSW.

Old tyres can also be incorporated into civil engineering projects as lightweight in-fill or embankments. Tyre Stewardship Australia provides support, through a research and development fund, to projects that are focused on increasing the use of recycled tyres in the marketplace.

Reduce Waste

Certain tyres can be retreaded – basically repaired – to extend their useful life. The process of retreading brings the tyre back up to a safe and usable quality by removing the residual tread and adhering new tread to the old tyre casing. This process has positive environment outcomes as most of the tyre is re-used at least once. Recycling tyres into new products saves energy, water and greenhouse gas emissions.

There is a great opportunity for the market for tyre-derived products to expand and grow in Australia so the community and businesses can help by 'buying it back' and closing the recycling loop.

This sporting field was made from recycled tyres

Take Action

- Look for a Tyre Stewardship Australia accredited retailer – search under the accredited option on tyrestewardship.org.au,
- If a mechanic or garage changes the tyres ask what they do with the old ones, don't be afraid to ask is they have the TSA accreditation sticker and/or certificate of accreditation on display,
- Consider having old tyres re-treaded or purchasing re-treads,

RESPONSIBLE TYRE DISPOSAL TSA ACCREDITED

www.tyrestewardship.org.au

Tyre Stewardship Australia is ACCC approved, and supported by Federal and State Governments. Tyre manufacturers Bridgestone, Continental, Goodyear/Dunlop, Kumho, Michelin, Pirelli, Toyo and Yokohama fund the voluntary Scheme.

Further Information

For more information about tyres and tyre recycling visit Tyre Stewardship Australia.