

# FOAM BOXES AND TRAYS

Foam boxes used in fruit and vegetable transport and the trays meat products are often packaged in, are made from a plastic called expanded polystyrene (EPS). This type of foam is used as it is an insulator against any temperature change, is durable, and protects because of its shock absorption. EPS is also very lightweight, consisting of 98% air (EPS recycling) and therefore as a form of packaging, its weight does not particularly affect the weight of the product. Today, EPS has many other uses such as building insulation and as a soil conditioner improving drainage and aeration.

Foam is manufactured using oil and petrochemicals. However, resource consumption is minimal. Expanded polystyrene packaging uses less than 0.1% of the world's oil, while over 86% is used for transport and within homes.

Polystyrene recyclers are able to remanufacture more than 99.9% of the EPS they receive, with the remainder being sent to landfill. However, in Australia, EPS recyclers are only located in State capitals and therefore it is necessary to be mindful of the waste it creates. While being chlorofluorocarbon (CFC) free and non-toxic, EPS is non-biodegradable (meaning it doesn't break down in nature). Almost all foam consumer waste is disposed of in landfills, and although it is light in weight, it takes up a lot of space due to its bulkiness.

Recycling EPS has a number of stages: first it is segregated, compacted and collected. It then undergoes granulation into smaller pieces, blended with other granules and is melted. While melting, colour can be added and remoulding can take place. Foam trays and boxes can be remoulded to produce loosefill packaging, recycled into items such as video and CD cases, coat hangers, and plant pots and reused as an aggregate for lightweight concrete.

## WHAT CAN I DO?

- Think about your contribution to landfill. Avoid the use of unnecessary packaging and reduce the amount of polystyrene used- buy fruits and vegetables unpackaged and select meat from your local butcher without the extra packaging.
- Polystyrene is a very durable product. Think about how you could reuse it at home. For example, as seed trays or using a lidded box as an esky.
- Find 'Recycling Services' in the Yellow Pages to see whether polystyrene is collected from your area.

## MORE INFORMATION

- [www.repsa.org.au](http://www.repsa.org.au) - Check out Recycling Expanded Polystyrene Australia for information about recycling polystyrene.
- [www.nanowerk.com/spotlight/spotid=1748.php](http://www.nanowerk.com/spotlight/spotid=1748.php) - Information on a new technology that recycles Styrofoam products to create a similar and more environmentally friendly one.
- The Plastics and Chemicals Industries Association [www.pacia.org.au](http://www.pacia.org.au) has information about expanded polystyrene, recycling and the environment.