

Waste!

We as humans are incredibly wasteful. Just by reigning in this waste, we could do much for the world's pressured ecology.

Throwing away food.

In a survey done of more than 1600 households in Australia in 2004 on behalf of the Australia Institute, it was concluded that on an Australia wide basis, \$10.5 billion was spent on things that were never used or thrown away. This amounts to more that \$5,000 per capita per year. By far the largest component of this was for food as shown in the following table:

Item	Value
Fresh food	\$2.9 billion
Uneaten takeaways	\$630 million
Leftovers	\$876 million
Unfinished soft drinks	\$576 million
Frozen food	\$241 million
Total value	\$5.6 billion

Young people wasted more than older people, higher income households wasted more than lower income households and parents with young children threw out the most fresh food (Hamilton 05). There appears to be little incentive to correct this as it is relatively good for business. Increasing prosperity leads to increasing waste as there is little financial pain. One thing is clear, the world suffers. This is an issue that has to be taken on by governments driven by public demand as businesses by and large have no incentive to reign this in.

Food packaging.

The use of plastic in food packaging is very widespread and adds enormously to our plastic waste. In many supermarkets all produce comes in plastic containers or wrapped in plastic. This convenience is largely unnecessary. The following UK statistics are from the Waste On Line web site (www.wasteonline.org).

Plastic used in packaging as % of all uses in the UK	35%
Plastic waste in household rubbish in the UK	7%
Proportion of the world's oil used for plastic feed stock	4%
Proportion of the world's oil used to manufacture plastic	4%
Proportion of the world's oil used for plastics overall	8%
Amount of post-consumer plastic sent to land fill in the UK in 2001	80%
Amount of post-consumer plastic recycled in the UK 2001	7%

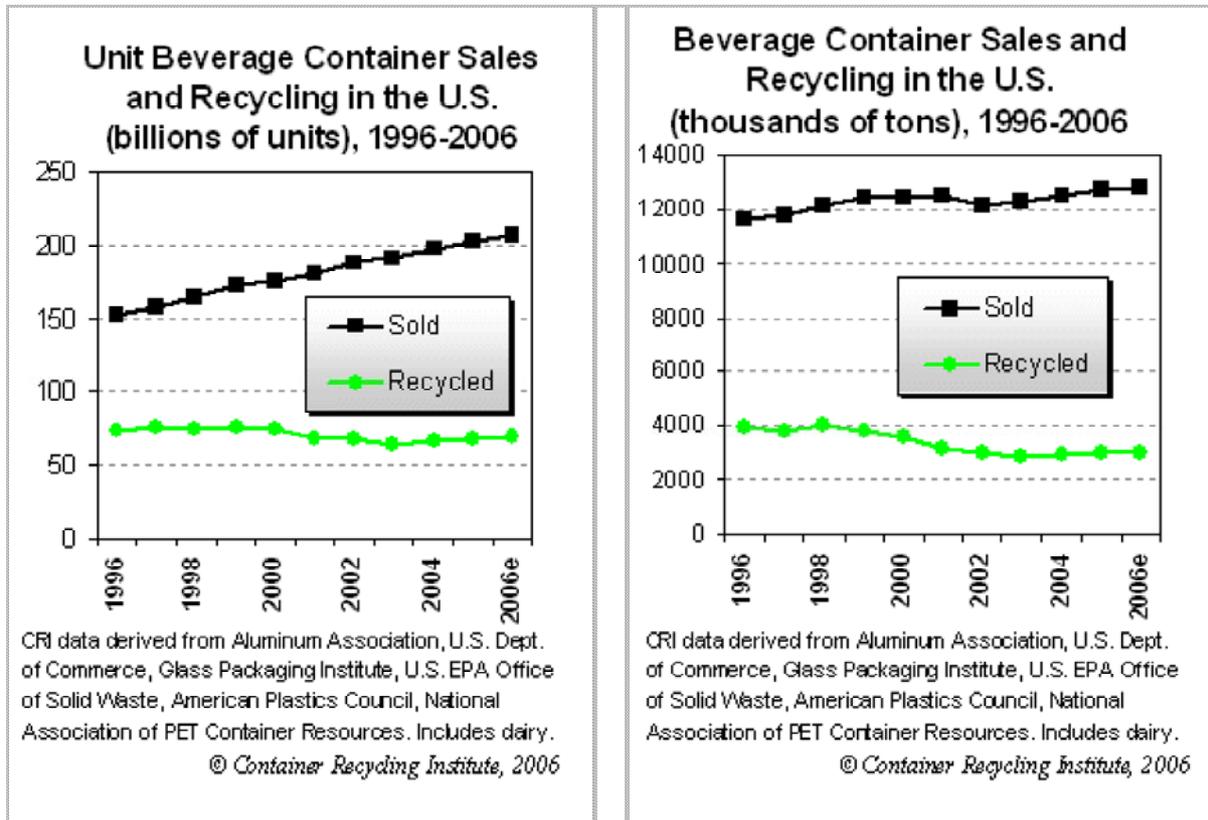
The UK is not alone in this. Many other developed countries such as the US, Canada and Australia have similar or worse statistics.

Let's stop kidding ourselves over plastic food packaging. The biggest single market for plastics is for food. Recycled plastics are not used in this because of the fears of contamination. The vast bulk of this ends up in land fill since much of this wrapping cannot be recycled at all. There are many other challenges to the use of recycled plastics in this setting: the recycled feed stock has to be manufactured to tightly controlled specifications something which is difficult to do and still be competitively priced compared to virginal plastic. The best solution all round is to vastly reduce our consumption:

- Avoid buying plastic wrapped produce
- Reduce consumption of foods in plastic bottles. Whole fruit is far better for you than fruit juices which as a bonus will also damage your teeth. See below about beverage containers.
- Avoid buying prepared food in plastic containers. Best of all make your own and put it in a paper bag.
- Don't use plastic shopping bags. Always take your own.
- Don't buy salad mixes in plastic bags from the supermarket. This is a double whammy of waste. Not only are these in non-recyclable plastic, the contents are also refrigerated from the time of harvest. Buy un-refrigerated salad vegetables and make your own. Save money.
- Choose foods that are wrapped in cellophane as this is a wood product and is from renewable sources.

Beverage containers are a major environment problem.

The growth in consumption of soft drinks has been staggering, particularly in the US but many other countries are rapidly catching up. Recycling efforts have only had a limited effect with the exception of some European countries such as Denmark. The following graphs were downloaded from the Container Recycling Institute's web site (www.container-recycling.org) and show mind-boggling large amounts of waste.



Many people have a mistaken belief that large amounts of our waste materials from drink containers are recycled. They aren't in many areas of the world. Much could be done to improve matters such as deposits on containers and refilling but above all, we should reduce consumption of these food items. They add so much to waste beyond the containers and most people seem unaware to these problems:

- Large volumes of water are used to make a bottle of drink. In some parts of the world it has led to the marked depletion of ground water.
- A very substantial amount of energy is used to chill the bottles and cans, particularly in the now common use of open refrigerated displays.
- Large amounts of energy are used to transport these drinks, especially bottled water that may travel half way around the world.
- Plastic waste is now a very significant environmental hazard in the oceans, silently killing untold numbers of seabirds. See below.

- Sweet and/or acidic sports and soft drinks are a dental disaster of huge proportions.
- Naturally sweetened soft drinks are adding significantly to the obesity and diabetes epidemics that are sweeping the world.

A far better approach is to drink ordinary tap water. It is far better for you and far cheaper.

Just how much energy is wasted if we fail to recycle aluminium cans? It takes about 0.22k/hr of electricity to make one can. To recycle the can uses only 4% of this figure. Hence every time an aluminium can goes to land fill we waste 0.21k/hr of electricity. In the US this year, around 140 billion cans will not be recycled, which represents around 25 billion kWh of electricity, enough electricity to power New York City households for more than six months.

Killing seabirds with plastic waste. Sixty six to eighty percent of marine litter is plastic which is very long lasting. One study showed that 44% of seabirds ingest plastic waste (Hutton 04).



Pieces of discarded plastic waste, such as from this broken plastic drink bottle end up in the sea where they are eaten by sea birds which mistake this debris as food. The photo on the right shows the skeletal remains of a sea bird killed by a stomach-full of plastic waste.

Long distance food transport.

Non-seasonal produce come at a price to the environment. We have become very spoilt in recent times. No longer are fruits and vegetables seasonal, they show up in our supermarkets all year round. However, this choice comes at a price. Many highly perishable things are air freighted from distant parts of the world such as exotic fruits, vegetables and flowers. Much more is transported in refrigerated shipping containers by sea. It is easy for me to buy "fresh" grapes and oranges which were grown on the other side of the world when the local produce

is out of season. In many parts of Europe and North America, much produce is transported by truck for huge distances. This represents a huge waste of our energy resources and adds substantially to our ecological foot print. Air freighting produce should be viewed as a crime against nature.

Corporatization of farming has led to produce travelling large distances. In the pursuit of ever more profits in an ever more competitive market, farms have become huge to allow for the economies of scale necessary to remain profitable. This has meant that many small local producers have been eliminated. Add to this the fact that large supermarket chains don't want to deal with small operators. More often than not, food grown in many areas is shipped to a central facility and then distributed back out to the local supermarkets. In many parts of the developed world, this has meant that fresh produce has travelled many thousands of kilometres before it gets to you.

Free trade agreements has opened up markets at the cost to the world's environment. My local supermarket sells common ordinary everyday commodities which are sourced from all parts of the globe and are often the cheapest available. What is not included in the price is the cost to the environment associated with the multi-national trade. If it were then they would not be the cheapest any longer. They have been discounted against the sustainability of the world.

What can you do?

- Don't buy produce sourced from outside the country if you can avoid it. In some parts of the world such as the UK local production has been so run down, it may not be possible to buy local goods (Lang 03). Many jurisdictions require country of origin labelling. If you are concerned about the state of the world resist the temptation to buy.
- Buy locally if you can, especially at farmer's markets. These goods are often organic which makes them even better. See the section on [What to eat](#).
- Don't buy out-of-season produce. It may be very convenient but it is bad for the environment as it has often travelled from afar. Price is often a good indicator. If you set yourself a maximum price/kg in the mid-range of prices, excepting the occasional luxury, then you won't wrong.

References:

(Hamilton 05) Clive Hamilton, Richard Denniss, David Baker. Wasteful Consumption in Australia. The Australia Institute. Discussion Paper Number 77 2005. Downloadable from www.tai.org.au

(Hutton 04) Ian Hutton. Plastic perils for seabirds. Nature Australia; Spring 2004:52-59

(Lang 02) Tim Lang, Geof Rayner, Editors. Why Health is the key to the future of food and farming. 2002 Downloadable from the web using Google.