



In the late 1980s the plastic milk bottle was unleashed on the public. Unhappy environmental groups in Auckland combined to form Save Our Bottles and last year vented their displeasure on the Auckland Milk Company. Photo: New Zealand Herald

1993, but it does not give any convincing ways for achieving this target.

There are very good reasons for actively encouraging waste reduction and recycling. We thereby conserve resources, promote a conservation approach, reduce pollution associated with disposal of waste, and, most importantly to some, we can save money by reducing the quantities of refuse that need to be disposed of in expensive landfills.

There are also plenty of opportunities for recycling, for example glass, plastics, paper, aluminium cans, other metals, oil, solvents, textiles. In some cases such as oil and scrap steel, government changes to cost structures have indirectly worked against recycling.

Last year 10 million litres of lead-contaminated oil was dumped or burned in New Zealand because it was supposedly more economic to buy new oil from the Middle East rather than collect it from around the country for recycling.

Deregulation of the scrap industry has been good and bad news for recycling. Good quality scrap steel is vigorously pursued and often exported, whereas unprofitable low grade steel is often neglected, although to the credit of both landfill operators and the scrap metal industry, some efforts are being made to recycle unprofitable or marginally profitable scrap steel.

Before 1983, all car batteries were New Zealand-made and recycled to recover and re-use lead. The industry was protected by special licences and by duties on imported batteries which cannot be recycled. The licences and duties have now been lifted and

imported batteries have flooded into the country. In 1983, 4644 batteries were imported but this rose to 72,543 in 1988. Today few batteries are recycled – many are probably sitting in sheds, backyards or at the tip leaking lead and other toxic chemicals into the environment.

Recycling Wrongs

If the opportunities are there, and the reasons are there, what is going wrong? There are a number of successful recycling ventures, but many others have been attempted and subsequently abandoned because there was no money in it. There are a number of reasons for this, including the fact that prices do not reflect the true value of raw resources, and that true costs of landfilling are often not reflected in setting landfill charges. There are also technical difficulties in reusing many wastes, and often a lack of information and awareness about waste reduction and recycling. There are also the difficult problems of individual selfishness and laziness I have already mentioned.

A United States pilot study has shown that much more waste can be recycled than is done currently. New Zealand's waste recycling record is nothing to be proud of in comparison to Japan, for example, which recycles 50 percent of its waste.

Barry Commoner of New York's City University carried out a study to get the most out of people's garbage. He showed that you can recycle 84 percent of people's rubbish. The people involved in the study kept three different containers in their homes – one for food

scraps, another for recyclable paper, cans and bottles, and a third container for non-recyclables – and the containers were picked up by trucks with separate compartments. The food scraps were taken to a composting plant, and the other products recycled.

Rubbish Mountain

In the United States, and other countries running out of landfill space, such an approach might have to be compulsory in the years to come. In 15 years' time when a New York landfill site is full, it will be the highest point on the eastern seaboard between Maine and Florida!

Even if we became a far less wasteful society there will inevitably still be wastes that will need to be landfilled. There are very good public health reasons for removing refuse away from people in a clean efficient manner and landfills should be recognised as very useful amenities.

Landfilling of refuse which cannot be reused can be regarded as a type of recycling in itself. Proper selection and management of landfill sites and proper planning for the use of completed sites can result in conversion of poor quality land (not wetlands or important shrublands!) into useful land and facilities. Former landfill sites can be used as parks and industrial land, and lead the way into the development of residential land.

It has been interesting to note that as the standard of landfill management has improved so that these facilities have been changed from dumps to landfills, the opposition to their construction has increased rather