

Zero Waste

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“Zero Waste” is a waste minimisation strategy for domestic waste that values the resource content in that waste.

Context

The ‘Waste to energy’ lobby likes to portray the Zero Waste movement as no-hoper idealists firstly, and waste disposal as a choice between incineration or landfill secondly.

What they are really against is the Zero Waste movement: composting, re-using, recycling and returning (Extended Producer Responsibility). In other words, the re-design of products to the point where there is negligible garbage to deal with – more returnable bottles fewer tetrapaks.

Waste management based on greed and profit rather than resource management.

The amount of waste going to landfill was increasing year on year until several years ago. Under the EC Directive we need to continue to reduce this progressively over a relatively short time scale. Some sort of value (recycling, composting, energy recovery) was only recovered from 22% of municipal waste in 2002. Now that figure is more like 40%.

Waste is no longer growing, and thanks to recycling, less and less is sent to landfill. The greatest need to reduce landfill arises in the North West (87%) and the lowest in the West Midlands (57%) but this comes at a cost - a greater proportion sent for incineration.

Is there a definition of zero waste?

The Planning Group of the Zero Waste International Alliance adopted the following definition of Zero Waste [updated in August 2009, see http://www.zwia.org/main/index.php?option=com_content&view=article&id=49&Itemid=37]. This is intended to assist businesses and communities in defining their own goals for Zero Waste.

"Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health."

This is the goal we are striving for. Measures of success in meeting this goal are outlined in the Zero Waste Business Principles and the Global Principles for Zero Waste Communities. Businesses and communities that achieve over 90% diversion of waste from landfills and incinerators are considered to be successful in achieving Zero Waste, or darn close.

Where can I see zero waste working?

The country that has most advanced this idea is in fact New Zealand, where a target date of 2020 has been set for total waste elimination. The idea is that resource recovery adds value to waste if it is extracted in the right way, effectively to '*...redesign the current, one way industrial system into a circular system modeled on Nature's successful strategies*' [Zero Waste New Zealand Trust: '*The End of Waste – Zero Waste by 2020*'].

New Zealand's orientation against incineration is a reflection of that country's dependence on dairy produce (particularly susceptible to contamination from dioxin, one of the most hazardous by-product of incineration generally).

What is happening in the UK?

In the UK, there is a huge variation in recycling performance – ranging from 10% to 70%. What we have at the moment is a waste management system based on greed and profit, not on resource minimisation or recycling. One particular problem: there is currently more money to be made for big business from burning or burying rubbish than recycling or reusing it, and traditional (and out-of-date) solutions are favoured as low risk economic strategies by Councils.

The "low-risk" description arises from the fact that almost anything can go through an incinerator without sorting and the calorific value of waste and therefore the value of electricity generated, is more stable than the market price of recyclables.

Things you wouldn't want to incinerate include: gas bottles and radioactive smoke detectors, and any sort of PVC, but what doesn't burn still comes out the other end. As long as incineration is the preferred option of the waste management industry, it gives a green light to the unscrupulous who can follow this route whilst claiming to be environmentally aware.

At EU level though, incineration no longer counts as renewable energy in meeting the targets. Generally speaking, many politicians at both local and national levels lack the will to confront the big multinationals and their funding partners that dominate waste management. Setting up expensive to pay for PFI contracts suits the banks very well and also the Treasury whose agenda includes convergence with Euro levels of public spending and who will not lend the capital sums to Council to pay outright for such facilities.

In the UK, the Zero Waste Chartists – a coalition of groups including Friends of the Earth and local Green Parties, sometimes with council support, are fighting the national policy of incineration and oppose the building of new incinerators around the UK. Opposition to incineration has been widespread in places such as Basingstoke, Derby, Kidderminster and Hull, and many others throughout England, Scotland and Wales.

Resource recovery is the key

As greens, we don't wish to see valuable materials used just once as packaging materials – for example, plastics, aluminum and composite drinks containers. Instead we would prefer to see scoop and save shops, places where people can buy in bulk using their own containers. The use of incineration technologies currently encourages just one method – combustion and electricity generation, known as *Energy from Waste*. It is not an efficient form of energy recovery relative to the energy required to make the packaging in the first place.

To achieve zero waste we need a planned, rational society based on meeting the needs of the vast majority of people. When we fight against the incinerators in our community we are fighting back at the bottom of the addiction model of a wasteful world of 'one stop' shopping and disposable throw-away packaging. By stopping the burning of the evidence, we create a crisis in the toxics disposal system – a 'teachable moment' for our communities.

A Zero Waste Strategy is a long-term strategy which informs industry that:

1. it can no longer expect cheap disposal services for its products and
2. at every stage of the supply line they must 'design out' waste, and.
3. leads us towards a clean production economy

When we look at 'zero waste', we are looking to change the paradigm which denies the value of resources or environment. When we talk about the viability of making goods with clean production techniques, we raise issues about resource use, such as:

- What kind of materials?
- Who control them?
- Who benefits?
- Who loses?
- Who are the key decision makers?

Why incineration and Zero Waste won't work together

Incinerators are particularly unsuited to a zero-waste philosophy as they generate up to one third ash, which has to be land-filled because it is so contaminated. They also generates *special waste* from flue gas filtering that will be an unspecified hazard for future generations. While there are new technologies able to create useable products, (even crude oil!) all require good source separation of waste items.

In Britain, the relatively few current energy-from-waste plants carry valuable planning permissions which constrain the future use of those sites but they could still continue to generate electricity from renewable means. But more significantly, it has immediate consequences for human health – generating particulates and dioxins whose characteristics are increasingly being viewed throughout the world as progenitors of anencephalus, cancer, spina bifida, stillbirth, respiratory and cardio-vascular disease.

Refuse-derived Fuel - a warning

RDF (Refuse Derived Fuel) which can be used in cement kilns, power plants, etc. and in the new breed of incinerators. It is mixed waste which has been sifted, mashed and dried, which have huge mountains of contaminated residue, and consists of highly combustible and polluting paper, plastics and rubbish. It can be burned as 'flock' or pellets. It is a most unwelcome development in producing all the pollutants described above.

Campaigning on Local Waste Plans

This is a worthwhile activity for a local group – and our planet - which will attract widespread community support and respect, and build alliances with FoE, Greenpeace and the Zero Waste Chartists. Many local Green Party groups such as Norwich are using these coalition-building tools.

Councils have split responsibilities for domestic refuse. District Councils collect but County Councils dispose. Only Unitary authorities, (like Coventry) do both. Most councils now have a recycling officer. Councils are supposed to follow the Best Practicable Environmental Option (BPEO) in defining their strategy for dealing with domestic waste. The good thing about this is that as better technologies become available then they automatically become BPEO.

Waste strategies

The ideal contract for a council: “We agree to pay the waste management firm £xxxxxxx to deal with or waste in a way that satisfies us, and that should we be unhappy with the situation, we reserve the right to withdraw”. Unfortunately, many councils rarely drive such a good bargain and lock themselves to incineration for a long time period...like Nottingham.