New Zealand Focus
Incineration Still Makes No Sense
Gerry Gillespie

When the then disused Meremere Power Station on the Waikato River south of Auckland was proposed to be refurbished in 1998 as a mixed waste incinerator, it drew opposition from around New Zealand.

Objections quickly formed around the potential harm to agricultural soils and markets, the increase in mother's breast milk of cancer causing dioxin and furans recorded in countries with incinerators and the senseless loss of resources. Anti-incineration activist Dr. Paul Connett, then Chair of Chemistry at Canton University in the US was called in to travel around New Zealand to speak at public events and to raise awareness of the dangers of incineration

The then recently formed Zero Waste New Zealand Trust and community recycling groups around the country highlighted the potential loss of resources and long-term employment potential of resource recovery. The collective actions of many people, despite support for the proposal through print media, were successful in having the incinerator stopped.

In subsequent years, these same resources which would have literally gone up in the smoke of an extended incineration contract, went to create employment opportunities in local community organisations such as Xtreme Waste in Raglan and Auckland City's current Zero Waste focussed strategy.

Recycling programs demonstrate that rather than mix waste for disposal to landfill or incineration, concentration on source-separation at the home, brings benefit to the community, higher sales value to the materials and quality to the end product.

Along with the many other Zero Waste communities around the world, this same policy has been followed by the government in Wales in its Toward Zero Waste strategy, which focusses its councils and communities on source separation as a means to increase diversion and increase value. This has resulted in Wales being a world leader in recycling. It has successfully demonstrated to 14 of its 22 councils that materials separated by individual homes can be placed directly into their material types on the collection vehicles, without the need to build a large materials recovery facility. *WRAP 7 Dec 2016*

This system enables Welsh communities to process their food waste in anaerobic digesters to generate energy and then use the resulting digestate from the process as fertiliser to grow crops. *Biomass Mag UK 2016*

By empowering communities to appreciate the benefits of source-separation, they are also provided the opportunity to recycle waste food and reconnect with the soil as their food producer.

History has shown us that using organic materials on soils raises soil organic matter and increases the human ability to continue to grow food on that land.

Increased soil organic matter helps retain moisture, expands biological soil diversity, increases nutrient transfer, sequesters soil carbon to help reduce the effects of climate change, reduces farmers' input costs and increases profits - all of which provides us with more reliable sources of food.

At a recent Soil Carbon conference at Chantilly in France, a document from the UN was distributed which stated that due to continuing soil degradation caused by using industrial agricultural methods, humans have reached a point world-wide where we only have enough soil left for 60 more harvests.
https://www.scientificamerican.com/article/only-60-years-of-farming-left-if-soil-degradation-continues/

This means under current chemical management systems, soils are degrading so quickly that our own grandchildren's children will not have enough soil for food production. Protecting our soils from degradation is a very urgent priority for all of us. We can help do this with processed organic material.

More than half of the waste we produce is organic. If buried in landfill it creates leachate and methane or when incinerated it creates dioxin, furan and toxic ash. When applied to land at your home or on a local farm, this organic waste can help us ensure the long-term viability of our food production system.

All clean organic material can go back to soil as quality compost if we get the material separated out from our waste streams and converted into quality products.

Organic waste, which we all produce every day, is the principal tool we have to reconnect the public to the soil as their food producer and as such, the issue of separating organic waste from other wastes should be seen as a soil and food issue, not a waste issue.

A large number of councils around the world now have source-separation systems for organic waste to reduce waste in landfill. Waste management programs involving landfill are seen as providing solutions to problems, not in building new opportunities for the community. Organic waste can provide such a new opportunity.

Only materials which are organic in origin will burn. There is no context in which setting fire to reusable and recyclable materials makes sense. If you remove all of the materials in any waste stream which can be recycled and all the materials which can be composted, there is little, if anything left to burn.

While it appears that incinerators make money by generating energy, they actually make money through gate fees. They are built and paid for using household rates.

Using precisely the same investment, the same vehicles and the same contractors, we can separate out our organic waste and recyclables to generate jobs and community engagement.

We can divert a lot of the funds we are putting into waste management towards creating new jobs and protecting our soils. Incinerating organic waste at Meremere made no sense in 1998 – Incineration still makes no sense today.

The removal of organic waste as a clean source-separated product for use in gardens and on farms means that the 'yuk' factor can be taken out of mixed waste. We can now collect food waste without odour by using fully compostable bags which allow air flow around the food waste. When we mix food into our general waste and it becomes anaerobic and smells, our waste problems begin.

Raising the awareness in the urban community to the fact that the soil is their mother and that the farmer is the principal producer of their food is key to the future of us all.

Gerry Gillespie, was the founding Manager of the Zero Waste New Zealand Trust – he is a highly regarded international speaker on the subjects of organic waste and compost.