

## Submission to the Tasmanian Waste Emissions Reduction and Resilience Plan

Why are we leaving it so long to produce a Waste ERRP - Nov 2024? What's happening between the closing date for this consultation and 11 months hence? Reducing waste, living within sustainable environmental boundaries and reducing GHG emissions is an urgent problem. We cannot afford to wait a year before we even have a plan.

A general comment - the draft Strategy and Plan appear to put much of the onus on consumers to change behaviour, and much less on industry and the commercial sector.

We need ambitious waste reduction, emissions reduction and recovery targets on all sectors. The few targets listed set a low bar.

LULUCF emissions reductions are currently disguising Tasmania's otherwise extremely high emissions per capita, despite our hydro-powered energy sector. Plus I have significant doubts re the veracity of LULUCF reporting, particularly given that regrowth now has followed a long period of forest exploitation and land clearing for agriculture. There is a decades-long lag between forest emissions occurring and regrowth being able to re-sequester the quantity of carbon dioxide previously emitted. Our annual reports should not rely on net emissions but separately report both gross emissions and sequestration. It would also be interesting to know just how much we've contributed to emissions historically.

The State of Play Report notes that waste accounts for 5% of GHD emissions, but does that take into account the embedded carbon in the 'waste' products - eg fossil fuels used in harvesting and manufacturing products plus freight into Tasmania of imported products and materials? It seems ingenuous to calculate waste emissions based solely on the *management* of waste.

Does the 5% emissions calculation include the high quantities of green waste brought to transfer stations which are *not* re-sold to customers as mulch or compost, but instead go into landfill? Given reporting requirements have only recently been standardised with the introduction of the waste levy, the data is likely lacking. I'm aware of at least one landfill where **all** domestically produced green waste brought is expensively mulched (adding further emissions) and then landfilled (where it will produce methane). None of this green waste is recovered, sold or composted. Additionally, I am told the same landfill is currently receiving very large quantities of composted green waste from a big composting facility, which was the recipient of a state grant. The EPA needs to be given independence, greater powers and more monitoring and enforcement resource.

All landfills should recover methane and leachate. The problem with leachate, is not just high nutrient levels, but also forever chemicals such as PFAS, and other toxic components.

For FOGO and other organic waste, aerobic composting (and reuse as a soil conditioner) should always be favoured over anaerobic digestion or flaring. The fact that TasWater (for

instance) can save on their energy bills by using biogas, is not a good enough reason for its generation. Putting 'bio' in front of something doesn't make it good for the environment. Biogas is just methane or a methane mix, and burning it produces CO<sub>2</sub>, which while a less potent GHG, remains in the atmosphere for very much longer.

Food waste is an appalling contributor to our organic waste in Australia. Millions of tonnes of perfectly edible food is dumped at the farm or wholesalers because it doesn't meet the exact specifications of supermarkets. Yet more is produced by grocery stores, supermarkets and restaurants. Tasmania could stop a great deal of food waste, by legislating, as France has



done, for supermarkets to donate all expired or unsold food to food banks and the like. The infrastructure for this would clearly require setting up. Not only is food waste a source of methane emissions as it rots in landfill, it also means farmers are not getting paid for dumped product, which affects their margins and hence their ability to manage their soils and livestock more effectively and for maximum health and emissions reduction. Supermarkets are the primary villains in this sorry story.

Photo of edible food retrieved from one dumpster outside a supermarket in Hobart, on one night. This level of waste is simply immoral.

Farmers could be assisted by govt to set up cooperatives and local farmers' markets to sell produce unwanted by supermarkets, and also to develop diversification schemes (eg unwanted berries to jam, potatoes to cattle feed, apples to cider/ juice/ vinegar etc).

There is undoubtedly food waste that is generated by processors also, eg dairies, which is most likely edible but doesn't quite reach specification. Sometimes food is dumped because the packaging is damaged, or the labels did not correctly reproduce. This type of waste could be easily eliminated by legislating for donations of edible waste, or by processors and retailers selling these products at a discount, or turning 'waste' food into other products with longer shelf lives.

A further problem with food waste (other than its management post-dumping), is the amount of land, water, fertilisers and herbicides/ pesticides unnecessarily used in its production. This could be avoided (and thus have a significant impact on agriculture emissions) if waste could be eliminated at all points on the supply chain, including by end users/ consumers, who are highly complicit in this issue. We've become complacent with the cheapness of fruit and vegetables in particular, such that they are not valued. I've always thought the price

signals sent by the free market lead to a wasteful society. If food were more expensive, but housing (for instance) cheaper (eg set at a cost-plus level), then we would better value farmers and food products, and naturally be less inclined to let food go to waste. Farmers would receive better margins and thus be able to farm less intensively (with fewer artificial inputs) and put more emphasis on animal (including wildlife) welfare, soil health and re-vegetation/ re-wilding of less productive areas.

Waste water. A far higher volume of water is treated than need be. If Tasmania legislated to include waterbutts and grey water recycling in new dwellings and other buildings, and provided grants for retrofitting old dwellings and commercial premises, far less water would be expelled into the sewerage system. Likewise the sewerage network is likely to have a high leakage and infiltration factor, given much of it is unpressurised spigot and socket gravity-fed reticulation, plus there are many legacy and illegal stormwater connections. In high rain events, wastewater treatment plants are overwhelmed, and even in normal operating conditions, far more water is treated by treatment plants than is necessary. A considerable percentage of the volume throughput is likely to comprise stormwater, particular during winter months. An intensive program by TasWater of fixing leaks in its sewerage network and dealing with stormwater connections, could greatly reduce its energy costs at waste water plants, as well as improving output water quality during high rainfall events.

We need to target the behaviours that lead to waste, littering and illegal dumping. At the consumer end, much nuisance waste may be caused by lack of opportunity to buy less wasteful products and a mix of lack of education, awareness, opportunity, monetary resources and a convenient (and possibly rewarding) means of disposal. The container refund scheme would assist this but always seems to be 12 months away. When it does eventually come in, it needs to be comprehensive, not just limited to a few sizes of plastic bottles, and ought to be to a nationally-agreed standard.

However, the onus should be on manufacturers and retailers to reduce waste from the very start of the process. Producers (including primary producers) should be capturing and re-using waste wherever possible. Plantation waste could be repurposed for fibreboard, engineered timbers etc. On farms, we need to target means to reduce the volume of artificial fertilisers used that end up polluting rivers and soil systems. Vast quantities of packaging waste are used on farms, including silage wrap and baling twine. Every piece of fruit has a sticker on it. Plastic pickers baskets are mostly thrown away and renewed each season.

Every item we purchase at each stage of processing, could have a levy on it, like GST but scaled according to how much waste and pollution and environmental harm went into its production (and its life-cycle carbon cost), and to what degree it is repairable, returnable, refillable/ reusable or compostable at home. That would be far fairer and a quicker way to change behaviours at all levels of the supply chain, than the landfill levy (which at a flat rate hits the poorest hardest). Hypothecation could ensure the money is used wisely in pursuit of further waste avoidance and reuse schemes.

Manufacturers should be required to take back and re-use (preferably) or appropriately recycle/ dispose of their product packaging and also to take back products at end of use, for similar treatment. We need right to repair legislation and facilitated repair cafés and maker/ mender communities. Right to repair should include the public availability of product specifications and wiring diagrams, doing away with sealed 'black-box' components, and legislating against planned obsolescence.

We could simply ban some products or legislate that they contain a high percentage of recycled materials. For instance, we could insist that items such as toilet paper, kitchen paper, serviettes, tissues, printing paper, stationery, newspapers etc, be 100% unbleached recycled, either from waste paper, waste cotton clothes, or short-cycle plants (that do not need harmful energy-intensive/ chemical intensive processing) such as willow. Actions such as this would drive innovation by manufacturers and less profligate use by consumers (who may change to reusable items eg washable cloth napkins/ nappies).

We need to keep things local. Waste is just as much over-use of fuel to drive 100kms from transfer stations to Copping (for instance) as producing the rubbish in the first place. By providing carrot and stick levers to drive local food systems, municipality-scale composting, micro-factories, repair cafés, comprehensive scavenging from 'rubbish' brought to transfer stations and landfill sites, bulk-buy shops (where own containers can be refilled), and convenient and rewarding ways for remote communities to reuse or recycle, we can divert untold 1,000s of tonnes of waste from landfill (and bushland and roadsides) and tackle greenhouse gas emissions and other pollutants. There are also considerable entrepreneurial and job opportunities in waste repurposing/ upcycling/ repair/ re-use.

Other points/ initiatives:

- School farms and gardens, community gardens and vegetable/ native nature strips
- Allowing roadside clean-ups (rather than just footpath clean-ups) by residents through initiatives such as 'Clean up Australia'
- Help for councils with old problematic landfill sites, and investment in local government to educate people and businesses, set up municipal composting facilities and FOGO collection etc. LG is at the pointy end of waste disposal and efforts should be made to activate initiatives such as the Joint Southern Tasmanian Waste Authority. So often these initiatives spend a great deal of money in admin and Director fees, instead of harnessing council officer and volunteer enthusiasm and just getting the job done.
- Banning PFAS in all packaging, clothing, kitchenware and furniture
- Greatly improving segregation opportunities at transfer stations to add greater value to 'waste' streams - eg different coloured glass, steel cans, aluminium, textiles etc.
- Insisting that government agencies and all levels of government commit to purchasing recycled or reused materials, eg for road-base, bollards, street furniture etc. Invest in micro-factories that use efficient biochar technology (eg gas circulation

etc) that can convert just about any organic material to a soil conditioner and fertiliser. Likewise other small-scale waste conversion technologies.

- Work with the biggest sources of roadside litter (ie food takeaways and bottle shops) to educate their customers and incentivise them to bring back their packaging and cans. Biodegradable containers might be a move in the right direction, but doubts hang over their manufacturing emissions, their actual ability to be composted, and whether or not they contain forever chemicals such as PFAS. Re-usable containers is a far better alternative, and legislation to ensure biodegradable containers are compostable in home conditions and are not contaminated with toxic components. Biodegradable containers themselves should be 100% manufactured from waste cardboard, paper and cotton, or better still from fungal mycellium or similar.
- This is a problem we need to deal with urgently. Waste management is vital for living within planetary boundaries, assisting with the maintenance of biodiversity and not further exceeding Tasmania's environmental limits
- Litter is a big cultural problem, particularly illegal dumping. We need education in schools and major public information campaigns as in times past. Make a big thing of Tidy Towns, get towns and townships competing, make it cool and aspirational to be environmentally sound, litter-free, sustainable.
- Soft plastics are a major problem – adding them to roads and plastic-wood is not a solution, it just returns micro-plastics to the environment. We need solutions for silage and pallet wraps, and to ban single-use plastics in all applications.
- Recycling, especially of plastics, is expensive and energy-consuming. It's far more cost-effective and emissions-friendly to cut waste out of the supply chain. More incentives and encouragement for supermarkets and other shops to have bulk foods and liquids so that people can refill their own containers.
- We ought to be able to vastly reduce for instance construction and demolition waste. Let's have more tip shops, salvage shops (for construction materials), legislation to enforce a percentage of re-use in all new building projects, research into ways to use eg gypsum board offcuts (soil amelioration)?
- Legislate to enforce better product design, ban difficult to reuse or recycle/ repair products, introduce new clear labelling specifications, so people know exactly what to do with materials and products when they no longer have a use for them.