

Thank you for allowing us to submit – the 2 books have not been published but I have shared the POD concept with a small number of people in the Vic and SA Gov't's owing to the fact that plastic recycling has been a concern to my wife Fran and I for many years.

The subject of plastic recycling is my retirement project and I am pursuing it using some of the following points to guide us (Fran Murphy is my wife of 50 years). Our preferences include:

- Continuous recycling of **mixed grade plastics** back to oil.
- Capturing **all** waste plastics (not a selected few specific items).
- **Not wasting** valuable **timber/fibre board/paper resources**because we really do need trees for other reasons.
- **Banning** plastic straws, disposable cutlery and thin plastic bags **has not worked** where ever I have lived. You will today find on the ground and in our waterways.....just as many paper straws, paper plates, some sort of wood type cutlery, plus a myriad of paper products taking their place – pollution is just as bad as it ever was.
- It is a 'must' that we **deliver our waste** plastics to recyclers/re-processors **in a user friendly manner** to avoid the drawback of expensive labour cost which results in a reticence of industry to get involved in establishing workable solutions.

The following is a photo displaying 11.5 month collections using the POD in our home – it totals 42 kgs so far (not taking up a great amount of space) - 21 kgs captured within our household/kitchen and a further 21 kgs collected from along the Maribyrnong river. We see this as being primarily a 'kids power' project designed to teach their parents to recycle the families plastics efficiently. The 2 footy depots are just 2 of many decoration options – we see the LC Recycled plunger batons raising money for worthy charities (or provided free to those with needs) and there is still lots more good stuff that we think can spring from this possibility.

The 2 tall stands of milk crates hold waste plastic filled PODswhile the 2 smaller stands contain spare unfilled PODs with my well used rubbish picker atop.

Many thanks and happy to discuss at any time. Footy team depots appear in strict alphabetical order! We'd also love to do a grade 3 and 4 schools trial to confirm the concept. The POD works well for us and will work well as a refund alongside all soft drink bottle arrangements



The cost of sending waste plastic to landfill and the justification for paying a POD refund.:

1. Capturing small plastic to enable recycling to occur
2. How much space do loose bags take up compared with compacted PODs of mixed plastics (Recycle)
3. Justifying paying consumers, a refund value for the return of compacted PODs (filled with mixed waste plastics)

1. There is currently no (cost free) system available to the consumer which allows them to capture and recycle their small sized rigid and flexible plastics (packaging)

The POD wins out here as it is focussed on Kids and kids' power to solve the plastic pollution for us.

Refer the kids' book – Meg, Ren, and Digger the Dog,.....save the world from plastic

2. Loose bags – Sometimes, one just has to do the hard yards to understand the problems associated with transporting, handling and safely storing loose bags.... And also, to come up with a viable cost justified solution to this problem – well, here goes with one possibility.

One of the many things I did today was to pick up from Coles a filled Redcycle bin bag full of consumer returned plastic bags.....the red tinted plastic lined bin was filled by customers with bundles of a wide variety of mixed plastic packaging which had been collected and temporarily stored in their homes – mainly supermarket packaging. The picture below displays the filled bin bag with an approximate volume of 0.9 c/metres and weighing 5 kgs.. Loose plastic packaging, packed this way takes up a lot of space and is a serious fire hazard especially in the home. It is at this point that I draw your attention to the need to reduce the fire hazard aspect based on the very sad outcomes experienced with the electrocution deaths of consumers/workers during the Gov't foray into the roof insulation debacle.



I then repacked every one of these bags, poking them in to PODs – recommendation: do not let your waste plastic packaging build up – place your waste plastic in your POD at the time you remove the packaging to make the task enjoyable. The quality of the plastic bag bundles was very good but not perfect – I found one very large paper bag amongst the waste plastic plus a small amount of meat packaging that was not been well washed.

I managed to fill/squeeze/fit and compact using my recycled plastic LC compactor jail baton, all of this plastic into 2 x 3 litre PODs plus 13 x 2 litre PODs with a final combined volume of approx. 0.04 c/metres – space was reduced by a factor of >25 and the end result was a cleaner, safer (fire), and more easily handled finished waste product that would offer the 'back-to-oil' reprocessor (and moulding companies) a very easy product to handle.

I'd like to point out that if readers are questioning the risk of consumers filling the PODs with rocks or other contaminants that the process is sufficiently challenging to almost eliminate this possibility – contaminant scanners can always be employed where necessary in the event that this became a problem.

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3. Justifying the payment to consumers a POD filling fee (reward for effort)

My suggestion is to base the returned filled POD fee \$'s using a weight factor at \$1.00 per kg for finished returned PODs.



This is a quick and simple task as per above photos. PODs hold an average 320grams plastic in a 2 litre POD and 450grams in 3 litre POD. Average refund = 32 cents and 45cents respectively based on paying \$1.00 kg plastic weight. This will work alongside soft drink bottle returns as per impending Vic legislation.

Justification payment calculated as follow - removing plastics from the council waste will save in at least 3 main ways

1. Less weight of waste going to expensive land fill - roughly >\$256 per tonne at landfill gate and based on removing 1.5 kgs of plastic per each landfill bin – **saving 38.4 cents bin**
2. Less bin spills in to gutters/footpath verges, on collection days – **saving >12 cents per bin clean up**
3. Taking the plastic out of council waste bins will reduce the pickups from once week to once every 2 weeks – evidence shows that bulky plastic takes up 40% of bin space – saves \$5 per pick up based on rates of \$250 per home per annum – **saving of up to \$5 bin at landfill gate**
4. Grand total payout by councils of \$1.00 per kg paid to the consumer is easily covered by the savings made in reducing landfill costs.
5. Refund based on 1 cent per gram of plastic. **320 g = 32c 450g = 45 c**
6. Collecting the 4 bins must have increased the cost to council after only using 1 bin initially.

And the good thing is we end up with a reduced need to import oil from the Persian Gulf and many other environmental benefits.

Peter Bourke

