Precious Plastic (Taringa)
(a division of d-Wizz Pty. Ltd. (ACN 638 770 144))

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Hello James,

I write to introduce you to Precious Plastic (Taringa), a plastic recycling initiative I started in January last year. It is a local chapter of the global Precious Plastic movement, which promotes plastic recycling at a grassroots level.

My operation has slowly grown from collecting plastic bottles and their caps to include almost all plastic. The main exception is PVC, which is toxic when heated. During the recent kerbside collection in this area, I retrieved about a dozen plastic chairs and 10 kids pools, which were promptly granulated.

About this time last year, I was building a small box shredder using blueprints from the Precious Plastic website. With the help of a few friends, I got this to work somewhat on a bench, and it dies indeed shred plastic, but only very thin material such as milk bottles.
I acquired a granulator in July this year, which still needs a little adjustment to realise its full potential, but it can process much bigger items than the shredder at the moment. I haven't granulated much plastic yet because there are a number of other more important issues going on right now which I shall explain a bit later in this letter. I'm planning to upgrade the shredder with a better motor and gearbox, but I need about $2,000 for this..

I am currently investigating the logistics of processing plastic bags into granules or pellets. To this end, I have been researching a machine known as an agglomerator, which basically operates like a large washing machine with rotating blades inside. As the drum rotates at high speed, the plastic film starts to melt due to friction. At a certain point, cold water is introduced into the drum, which causes the material to densify, and the blades then shed it up. Apparently the final output resembles "plastic popcorn", which can then be fed into another machine such as a extruder or injection moulder.

I've been trying to get quotes from overseas manufacturers for a small agglomerator, but so far I have not received a suitable response. They appear to be in the range of $1,800 - $3,000, which is within reach of my budget in a few months. While I continue my search for such a machine, I've been very busy preparing my stockpile of plastic bags by rinsing and storing them. I've done about 1,500 bags in the month of October. Before learning about the aggolomerator, I used a sandwich press and baking paper to densify the bags, but this is labour-intensive and quite slow.

In my research on this subject a few months ago, I was not able to find any entity in Brisbane or Queensland which mentioned processing plastic film (so-called "soft plastics"), so perhaps I could be the first and only one to do this here. The RedCycle program, which collects soft plastics at supermarkets, processes that material in Victoria.

Storage of plastic waiting to be processed is my biggest problem right now. Last year, I was storing most of it in large bulk bags in my front yard. The Queensland Government has been on my case constantly for more than 18 months in vehement opposition to my operations. Earlier this year, I was summonsed to QCAT three times, faced with eviction over this matter. Ultimately, that case was withdrawn by the Government, but they have not stopped the harassment.

I signed a 12-month lease on a commercial unit in December last year, which has cost me over $20,000. While the owner of the unit has no problem with me storing plastic and processing it there, the body corporate kicked up a stink after their insurer refused to renew the policy until the "cessation of all plastic recycling activities in the complex". The lease payments consume about 90% of my Disability Support Pension. I have been able to generate a small income stream for the company with a few small contracts. It's been very tough, but I have made it through this year without any outside assistance. In particular, the lack of available funds has hampered my ability to purchase essential machinery to process the material I have collected.

I have been searching for an alternative storage facility for about 6 weeks now and nothing has come up. I have sent letters to owners of vacant land offering to lease it from them for a reasonable amount but no response has been received from this to date. With less than two months until the end of my lease, time is beginning to become a problem.

About two months ago, there was a small amount of interest in my operation from Rebecca Levingston, host of the morning program on ABC Radio Brisbane. She sent me a few emails, but I haven't heard anything for quite a while now, so maybe it's dropped off her radar. I am still keen to explain my project to a wider audience, as I am aware there is much interest among the general public about recycling, especially plastic, given that it is so ubiquitous and difficult to dispose of in an environmentally-friendly manner. Maybe there will be an opportunity to have a chat on the ABC about plastic in the future. There are more than 100 followers of the Precious Plastic (Taringa) Facebook page.

So, how can you help? My two biggest needs right now are storage space and a small amount of financing. Storage-wise, all I need is a small piece of vacant land, about 250m², for me to store about 100 wheelie bins of clean plastic ready for processing. There are no offensive odours associated with this material, and the bins protect it from the effects of the weather, while also keeping it organised and tidy. The bins themselves will eventually be granulated as I work through my stockpile. I'm willing to pay up to $1,000 a month for this. I don't need any utilities such as power or water, just a place to store the bins with 24-hour access.

Financially, as I've alluded to previously, I've spent more than $50,000 of my own funds in the last two years on this project. There has been zero government funding in the form of grants or loans in any form. My Australian registered company has been ineligible for every COVID-related payment from all levels of government so far, despite suffering some economic effects of the pandemic. Many other government grants are also inaccessible to me because of my company structure, or my turnover, or other criteria.

I would like to acquire more machines to speed up the processing. I do not know how much these machines will cost because I expect they will not be available "off-the-shelf", so they will have to be built from scratch. I have a few local machine shops in mind to assist with this. As a ballpark figure, $25,000 would go a very long way to getting some important machinery built and installed. I'm even willing to pay part or all of this back over a few years. As a welfare recipient, I am unable to apply for any kind of loans from banks, etc.

There is a lot more I could say about my plastic operations, but I'd like to keep this brief. Thank you for your interest and I look forward to working with you and Council to keep plastic out of landfill.

Yours sincerely

David Barker
Precious Plastic (Taringa)
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