



# Precious Plastic Plymouth



**Our vision is of a world where creative energy drives environmental change**

**Our mission is to provide a tool for local recycling and creative engagement to empower the community to live sustainably.**

## **What are we planning and how will we do it?**

We can't actually claim to have come up with this excellent idea ourselves! Precious plastic is a global community initiated in the Netherlands by a group, who in the true spirit of social enterprise, put their idea out there for us all to use. You can view all the designs, products and community correspondence here: <https://preciousplastic.com/> . Basically, it involves recycling plastic by shredding it, heating it and remoulding it into new useful/artistic creations. The plans for building the machines are open source and they are simple and quite cheap to build. The Plymouth Play CIC, Scrapstore building on Union Street would be a perfect location for this as there is space and a supply of clean waste plastic. We would be thinking of using this to recycle plastic which is otherwise difficult to recycle. It would also reduce transport and other costs associated by recycling locally. We think of this as a fun project to bring the community together, engage with recycling and plastic waste issues and get creative. Even better, this process can create high quality plastic products which can be sold. Luckily Plymouth Octopus Project, POP+, also thought this was a great idea and have given us some funding from their learning and collaboration fund to get going!

<https://www.plymouthoctopus.org/>



Recycled plastic sunglasses frames from Precious Plastic Bazaar

Whilst we are isolated from each other we would like to see who would be interested in getting involved. How they would like to contribute and/or gain from joining in. We can design products, shred plastic, possibly create moulds and maybe even produce some creations without physically working together. We can also share the process by video, and communicate via online community chats.

**There will be a first opportunity for those interested (in whatever way) to join the conversation through an on-line meeting (using Zoom) on 4th June 11-1. [The meeting link will be sent later]. If you are keen to be involved please send your contact details (email /phone no.) and briefly what would gain/contribute to [kate.crawfurd@gmail.com](mailto:kate.crawfurd@gmail.com)**

**If you want to learn more about using Zoom before then please check out these informal learning opportunities run by POP+ <https://www.eventbrite.co.uk/e/zoom-play-learn-session-tickets-102166336262>**

## Why Plymouth?

Plymouth is the nation's number one social enterprise city. There is a strong and creative community of organisations and individuals who want to make a difference. To do things in a new and better way and solve some of the problems which threaten our world at present. We are less driven by commerce than some other communities, we choose to live here for the better quality of life and proximity to beautiful natural landscapes. Environment Plymouth brings together many of these people. There is also a world class scientific community focusing on environmental, particularly marine, issues. Professor Richard Thompson OBE and the University of Plymouth recently received The Queen's Anniversary Prize for pioneering research on marine microplastics pollution. Plymouth Marine Laboratory, The Marine Biological Association and the National Marine aquarium are all tackling environmental challenges with a major focus being plastic waste.

Here we have two strong groups with a common goal, together with some crazy ladies who want to squish all that waste plastic and reform it into ornate plant pots, playground benches or perhaps some component of a tidal turbine or COVID-19 protective visor.



**Why now?** Although right now we are all focussed on COVID-19 there are still urgent environmental challenges that we face. Global change and the plastic waste problem are two of the biggest. Global lockdown has in fact given many of us a chance to reflect on the important things in life. We are anxious about our families, our usual way of life has been threatened and communities have really pulled together to support the vulnerable amongst them. We have also seen that it is possible to live and work without flying and driving, global carbon emissions have fallen around 17% during lockdown (Le Quéré et al. *Nat. Clim. Chang.* (2020). <https://doi.org/10.1038/s41558-020-0797>).

Although this idea was born before COVID-19 it is more pressing than ever now and perhaps this time will have given us a chance to slow down, think and see alternative ways of life which seemed to be an impossible dream a few months ago. When we were driving along the motorway to visit family for Christmas I remember us commenting that it would be great if cars were banned and we could all cycle and walk along here. Now suddenly we are all on bikes and these things are really happening!



## Why Plymouth Play CIC?



There is an undeniable ethos of fun at play here, but the Scrapstore is a well thought out, practical solution to commercial waste. Plymouth Play CIC formally Plymouth Play Association has been around for over 25 years. The Scrapstore was conceived and has been operating for over 20 years. Off-cuts and scrap from commercial production is brought here and sold at low cost as craft materials for schools, individuals and communities. The



Scrapstore is the perfect location for a Precious Plastics recycling plant. Clean, waste material is delivered here; there is space; there is a client base of creative, environment conscious individuals. There is also creative energy and most of all fun! This recipe is going to spark some crazy ideas. <https://www.facebook.com/plymouthplay/>

### Who are we?

**Jane Hembrow** was part of the original team that set up The Plymouth Play Association, ( Now Plymouth Play CIC) with the development of the association came the need for a resource centre ... which over time became known as the Scrapstore. Nowadays and in retirement Jane continues to be involved with the behind the scenes work of the Scrapstore, attending meetings, promotion of the “business” and helping with funding bids, staff and volunteer support and can occasionally be seen talking to shoppers in the store. Jane’s passion lies in Play and sees the development of Plymouth Play CIC and scrapstore as an opportunity for all ages to play ..



“ We do not stop playing when we grow old, we grow old when we stop playing” George Bernard Shaw

Play takes many forms and creativity is a great example, we love to be able to make playful creativity as accessible and affordable as we can, and by joining up with a new audience through Precious plastics we hope that we can excite and encourage even more opportunities for “play”.



**Susan Moores** joined the Scrapstore Team as a volunteer in 2009, and has ever since been involved - supporting staff, developing policy, writing funding bids, packing glitter and occasionally is seen with a broom in her hand. More recently she has been covering some of the shop hours so that our Resource Gatherer (Rachael) can get out collecting new treasures for the barrels. Susan said "I have always enjoyed my involvement with Plymouth Scrapstore, as much because of the team of committed scrap, play and community enthusiasts, as well as for the inspiration for creativity, and concern for reducing waste and consideration to our planet." #PlymouthScrapstore #HomeofPlayfulCreativity #NoDayTheSame



**Dr Kate Crawford:** I am a Doctor of plankton, their viruses and ecology. I also work as a theatre scenic artist and mural painter. I enjoy engaging people in science through the creative arts. I love the sea, respect nature and wish to improve the way we interact with the world. You can see my artwork and science engagement here:

[www.katecrawford.co.uk](http://www.katecrawford.co.uk)

<https://www.facebook.com/KateCrawfordArtist>

<https://www.instagram.com/kittocrawf/>



## How can you get involved?



**We would welcome advice from chemists, materials scientists and anyone with expertise on plastic.** What would be the most beneficial types of plastic for us to recycle. How to tell them apart if there is no recycling symbol. How to avoid releasing toxic fumes.



**Can you help us to optimise the design of the machines?** Precious Plastic has open source designs for 3 types of machine. A shredder, an extruder, an injection moulder and an oven. We may want to alter these to fit our space and purpose. For example, we could make them pedal powered, mobile or extra efficient.



**Can you help us to build the machines?** They are quite low tech and can even be made from pre-existing parts such as ovens, toasters and blenders.



**Would you like to donate plastic for recycling?** We will need clean plastic to recycle.



**Would you like to use this as an educational platform?** We see this as an engagement tool as well as a practical piece of machinery. We hope to engage people from diverse backgrounds with the idea of encouraging recycling and awareness of environmental issues and sharing scientific knowledge.



**Would you like to use this as a creative tool?** The machinery basically shreds and reforms plastic. This can be extruded in long threads, like plastic washing line, or injection moulded into useful or artistic creations. There are lots of examples of the versatility of the material on the Precious Plastic website.



**Do you have ideas for useful products that we could make?** Moulds can be made for items such as plant pots, soap dishes and trays. Modular interlocking forms could also be made for larger projects.



**Are you a tech wizard and can help us share the creativity with an on-line audience?** COVID-19 or not, we would like to have an on-line community involved in this project. At present this is even more important than usual.



**Would you just like to come and have fun and try this out?** Once we are able to run workshops again we would love to have people in to see and use the machines.



**Do you feel that you are part of the puzzle in some other way?**

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