

Project Overview [DRAFT]

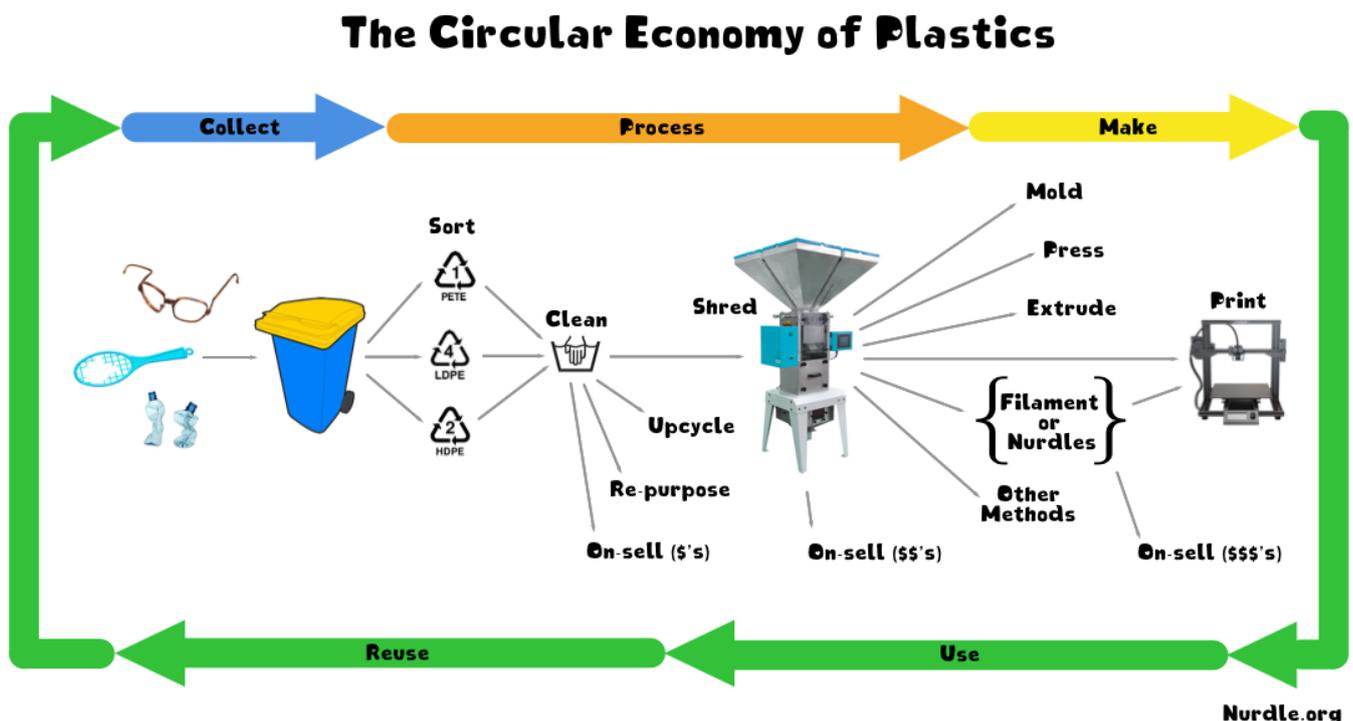
The Nurdle project follows four basic stages:

1. Collection
2. Processing
3. Making
4. Review

All reference material and teaching resources use this index to allow you to easily find the correct material.

The project can last anywhere from a few weeks to several months. In fact by far the best outcome is to adopt the ideas from the project into everyday life and encourage others to do the same. We would love to hear from participants ongoing experiences and developments.

The following diagram below shows the basic overview of the process



Activity 1: Collection



Description

- Plastic waste is collected separate to other recyclable waste.
- It is not segregated or separated by plastic type but collected all-together.
- Encourage washing of dirty / food wastes before storing

Elaborations

- You can measure / count how much waste is collected in one day / week / month
- Encourage participants to increase yield by collecting litter / promoting the project
- For subsequent collection periods encourage positive behaviours to reduce single use plastics.
- Analyse where does plastic come from?
- Spread the news - How can we promote more / better recycling behaviours

Activity 2: Processing

Description

- Waste is identified and segregated by type.
- Plastic type identification is important as it determines what can be done with the plastic.
- Thermoplastic waste that is able to be recycled is cleaned and dried and granulated into small particles - this is new raw material.
- Other plastic wastes are processed according to their intended usage. (projects are listed for ALL waste types, even if some are not able to carried our by everyone).
- Materials are labelled and stored.

Elaborations

- Analyse what each particular item is made from?
- Analyse what properties do the different plastics have?
- Promote this new raw commodity as a thing of value - Analyse how each process adds value to the finished product
- Try to think of other uses for the new raw materials
- Materials that cannot be processed are packaged and then take to appropriate recycling centres.

Activity 3: Making

Description



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- Providing the participants with the opportunity to make something physical from waste products should help scaffold the learnings but it is important that they actually get this opportunity
 - Plastic granules can be directly used in the 3D printer to print new objects
 - Granules can also be used to extrude filament / injection mold / mold press
 - Polythene bags can be laminated to make 'material' that can be used to make a range of items (hats / bags / pencil cases etc)

Elaborations

- Encourage participants to create their own designs (extra points for designs related to recycling)
- Encourage participants to make items that can be used by the school or sold at the school fete. Some examples are included in the downloads section
- Analyse of other ways to use the recycled plastics - especially those plastics that cannot be recycled - discuss up-cycling and re-purposing
- Spread the word - How can we raise awareness of this process to engage others?

Outcomes & Review

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- It's important to analyse the outcomes from the project, this is very much an outcome driven initiative.
 - Did the outcomes meet the expectations of the participants?
 - Have all participants designed & made something?
 - How can the project / process be improved?
 - Engage participants to help improve the process
 - Analyse how much plastic waste was collected, what type it was and how much of it was able to be reused.
 - Think about ways that plastic waste can be reduced.
 - Merge other initiatives into the project