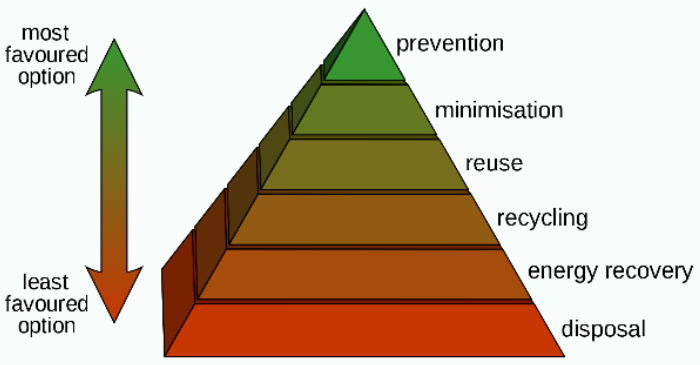
Recycling wasteflows of the BAC

1. Reason/introduction

Our society is based around consumption, especially plastic products and disposables. The government implements measures, for example deposits on every PET bottle. This leads to less litter and the sorting becomes easier for the waste processing companies. The best way to treat a wasteflow is by using Lanksink's ladder *(Figure 1)*.



2. Strategy

At the BAC we consider **waste streams** from a **compounder**, **injectionmoulder**, **3d-printer** and a **filmblower**.

Generally, a waste stream will be **reused** as much as possible for the same technique it was gathered from.

Based on **material properties**, **available amount** and the **technique** used, it is possible to apply the material; hence reusing and recycling internal BAC waste.

3. Results

few examples of applications:

- Recycling waste streams into pellets as purge material.
- Tubes for the filmblower from film waste

CoE BBE also works on the bigger picture. Few examples:

- Project recycled PP from fishnets. (Filament)
- Recyclability of PE en PP biocomposites

4. Conclusions

- A lot of different specific materials with different properties
- In terms of feasibility, very energy and time consuming
- Available amount is general not enough to apply in practice
- Fillers and additives limit the options further
- Much more complex than originally estimated

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