



PlastiCity

Resourcing plastics from the city

WP 5 – OUTPUT 8.3

Output 8.3 Implementation of PlastiCity hub at DPL

Date of finalisation of deliverable	29/01/2021
Partner responsible for finalising deliverable	DPL
Partners that contributed to the deliverable	/

Content

DPL group mainly recycled post-industrial film for the last 40 years. Since the PlastiCity project we have only increased experiments with more contaminated film, for example post-packaging and even post-consumer film.

These experiments have taught us that when waste does not come directly from an industrial source, its properties diverge much further and the density is even lower.

From Januari 2020, the installations have been successfully implemented in our production plant. The purpose of our investments is to overcome these problems mentioned above.

Pierret - chopper



We were able to purchase this machine second-hand at a textile recycling company. It is ideal for reducing light materials in size. When handling films, especially post-packaging, it is very important not to shred the material but to keep it compact for the sake of the subsequent treatments. The waste we used in the picture above is comparable to the bags we expect to receive from the cities and as you can see the material remains dense.

Lorandi silo - mixer

This piece of equipment was purchased to homogenize both waste and granules.

As mentioned before, waste streams we do not know various specifications or the source of, can diverge a lot.

Even when sorted correctly properties like MFI, density, strength, elongation, etc. can and will still deviate.



Only when the granules are mixed we can guarantee valuable reprocessed material with a continuous quality to reuse.

In addition we can modify the ratio post-consumer – post-industrial and thus comply with current European legislations (for example: garbage bags).