

## **List of side stream categories**

1	Aerobic biomass	Secundary sludges of water treatment plants $\approx$ 70% water
2	Primary Sludge Paper	Primary sludges of water treatment of recycled paper industry + deinking sludges of paper industry $\approx$ 50% water, 30-50% cellulose fibres, 20-70% minerals (and deinking sludges also contain ink).
3	Primary sludge agrofood	Primary sludge of agro-food industry (eg. small potato fibres)
4	Manure	Manure
5	Digestate with high metal content	Residual streams from processing agricultural biomass (eg. digestate) with high metal contents (= not allowed as fertilizer)
6	Biomass + plastic	Biomass contaminated with plastics (e.g. from horticulture and auctions ( $\approx$ 5% plastic, rubber, ropes), or reject streams from recycled paper mills) (coarse reject: 50-95% plastics; fine rejects $\approx$ 5% plastic)
7	Biomass + plastic + metal	Biomass contaminated with plastics and metal (e.g. ragger ropes from recycled paper mills
8	Grass and prunings	Grass and pruning waste (Challenge: highly periodical: Herbaceous crops in summer – mix (grass from lawns, ditches and verges, leaves), and more woody streams in winter)
9	Heavies grit	Heavies grit (high density rejects – mixture of staples, glass, stones, sand, coatings, plastics)
10	Heavies chute	Heavies Chute – mixture of large contaminants, e.g. big pieces of metal, concrete, labels, rolls,
11	Vegetables / fruit	Vegetables / fruits – unprocessed – single or as mix, challenges: presence of insecticide or other disturbing components, like plastic labels processing towards food ingredients not cost-effective limited nutritional value for feed (compared to alternatives)
12	Fish	Fish (a.o. after isolating fish oil and fish meal)
13	Hydrocarbons in water	Mixtures of 5-20% (fossil based) liquid hydrocarbons in water
14	Microplastics	Mixtures of recovered microplastics (with some water)
13	Mixed plastics	Plastic mixtures (unsuitable for recycling, e.g. because of contaminations with food or multi-materials that cannot yet be mechanically separated)
16	Mushroom compost	Spent mushroom compost
17	Fats	Fat / grease (a.o. from municipal waste water treatments), mixture of fat, oil, sludge, water and some other contaminations
18	Concentrated waste water	Concentrated waste water streams (after biological / membrane treatment OR not suitable for biological treatment)
19	Tare Soil	Tare soil
20	Lime	Lime with impurities (used in sugar beet processing)
21	CaO	Betacal (CaO with mineral fertilizer components, e.g. P2O5, K2O, Mn, Fe)
22	Permeates	Permeates from dairy industry (High ash content, many nutrients like P, N and salts)