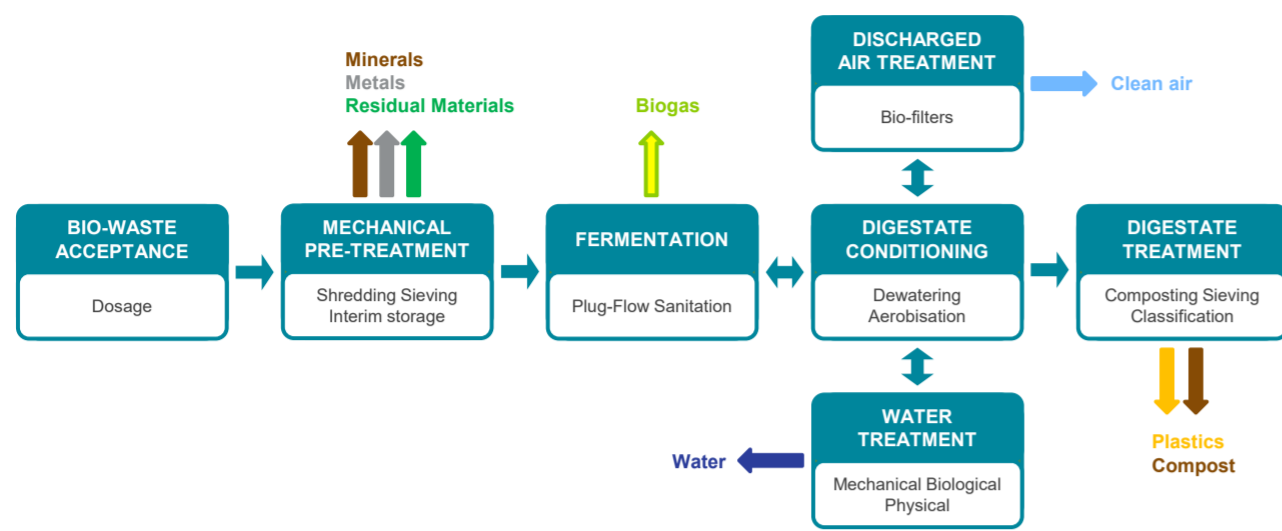
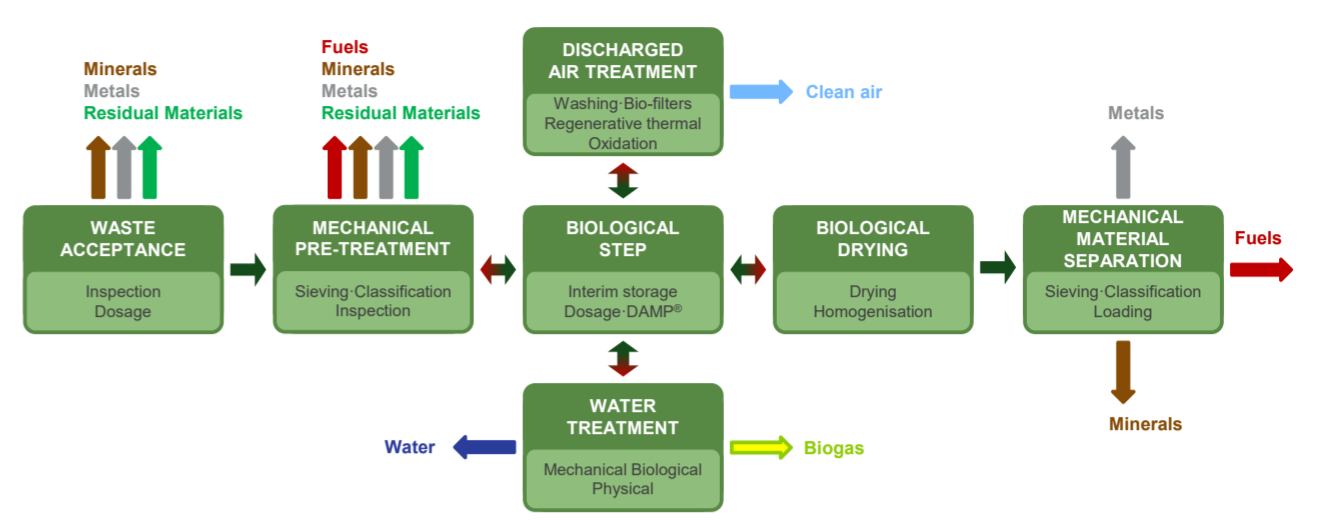




Dry Fermentation / Plug Flow



Maximum Yield Technology (MYT®)



Anaerobic	Conditions	Aerobic / Anaerobic
Only digestible organic material (separate bio-waste collection)	Waste type	Municipal Solid Waste (MSW) (single-stream collection)
Narrow → only organic fraction of MSW can be converted to product (Biogas)	Input material bandwidth & products	Wide → organic and calorific fraction of MSW can be converted to products
		
<ul style="list-style-type: none"> Biogas Compost 		<ul style="list-style-type: none"> Biogas RDF
★	Material disintegration	★★★
Organics reduction (biogas yield) typ. 20 days	Treatment target	Fuel production (biogas & RDF)
typ. 40 days (aerobisation & composting)	Process time	typ. 2-3 days
	Post treatment	typ. 9 days (biological drying)
Low → limited due to plastic contraries	Product Quality	High → direct coal supplement

Most MSW treatment processes struggle with the water stored in the waste (waste-derived effluents such as leachate, bunker water, MBT centrate)

These effluents are highly polluted, typical values are:

- COD 20,000 ... 60,000 mg/l
- NH₄-N 1,000 ... 3,000 mg/l
- High Conductivity

These effluents vary with the waste composition (organics), pre-treatment, climate zone, ...

Due to the toxic impact to the environment and aquifers, these effluents must be treated before being discharged to sewers or into water receiving bodies. However, treatment of the complex effluent matrix is often being neglected due to the difficulties and costs involved in doing so. The difficulty is in many cases the lack of knowledge that appropriate and cost-effective treatment technologies from WEHRLE are on the market since several decades.

Examples for MBT effluent treatment plants

ZAK, Ringsheim / DE (MBT)



Ecoparc 2, Barcelona / ES (MBT)



anaerobic + aerobic (MBR)		Process	aerobic (MBR)	
700 m ³ /d		Flow rate	140 m ³ /d	
COD	NH ₄ -N	Parameter	COD	NH ₄ -N
50,000 mg/l	1,800 mg/l	Inlet	30,000 mg/l	5,000 mg/l
< 400 mg/l	< 50 mg/l	Outlet	< 1,500 mg/l	< 10 mg/l
> 99 %	> 97 %	Performance	> 95 %	> 99 %