

# MSW management with recycling and waste to energy

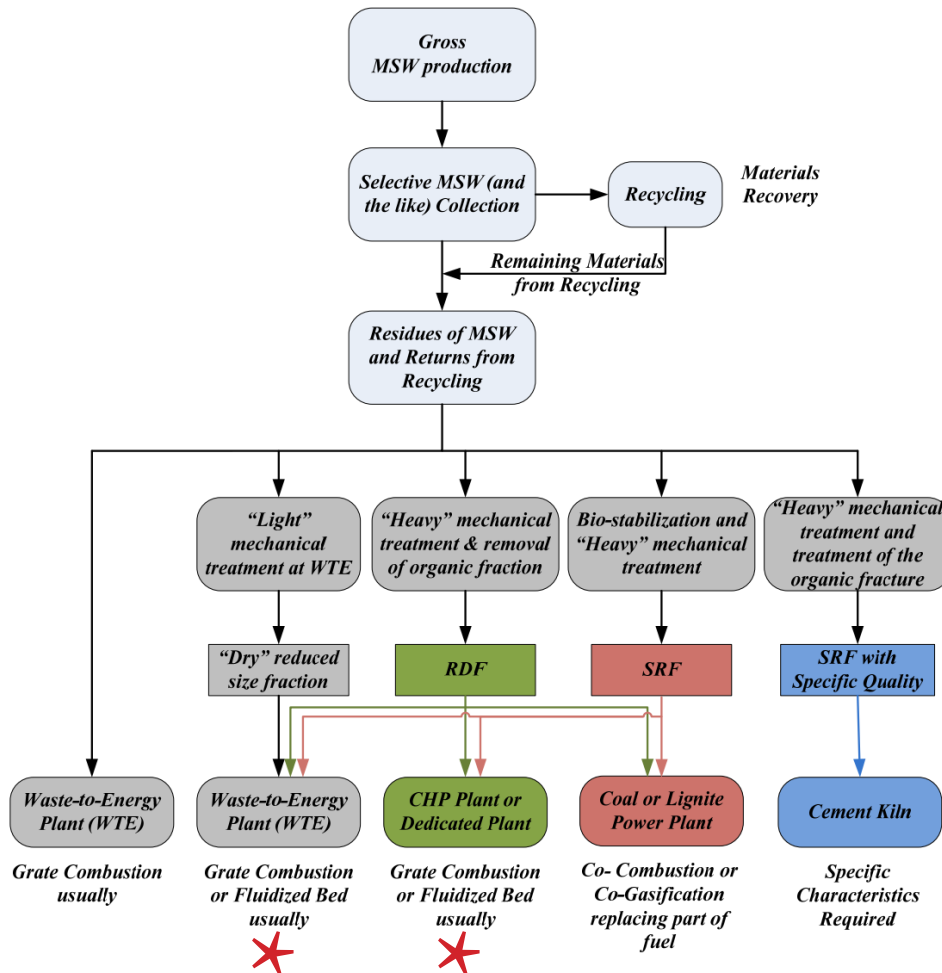
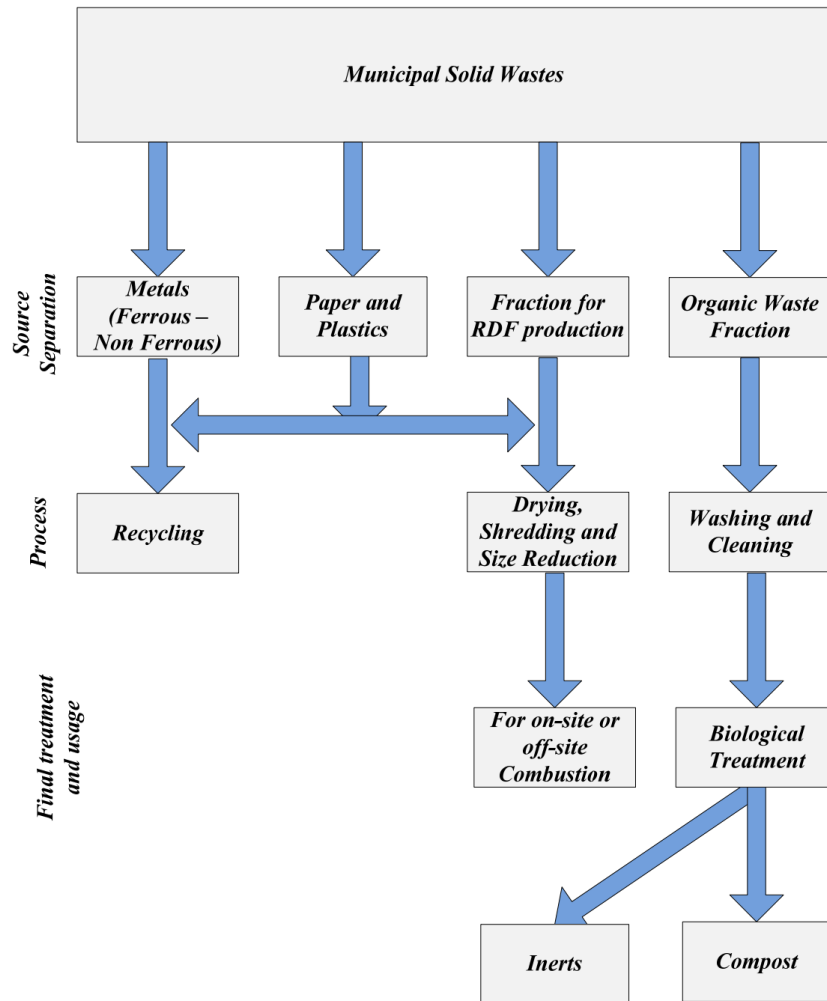


Figure 1. Schematic diagram for RDF/SRF derived from MSW utilisation alternatives.

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**BFB (bubbling fluidized bed) Power Plants**  
(CHP or electric only)  
**Fuel: RDF or Biomass**

- ✓ Multi-fuel input - from wood to black bag waste
- ✓ Very cost effective energy production
- ✓ Efficiency over 90%
- ✓ Low Maintenance Solution



**Figure 2. Schematic diagram for RDF production from source separated MSW.**

**Table 1. Typical Ranges of RDF Properties (source [10-13]).**

Chemical Properties		Mechanical Properties	
Calorific Value	11–18 MJ/kg	Particle size	10–300 mm
moisture	10–30 % wt	Bulk density	120–300 kg/m <sup>3</sup>
ash	10–20 % wt		
Cl	1.0–1.8 % wt		
S	0.3–0.8 % wt		

**Table 2. Typical Ranges of SRF Properties (source [10, 13, 15]).**

Chemical Properties		Mechanical Properties	
Calorific Value *	3–45 MJ/kg	Particle size	10–300 mm
moisture	<25 % wt	Bulk density	120–300 kg/m <sup>3</sup>
ash	<20 %		
Cl	<1.5 %		
Hg	<0.5 %		

\*Depending on the type of SRF, while typical values are 12–25 MJ/kg