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Supplementary material

The Cradle-to-Cradle Life Cycle Assessment of Polyethylene terephthalate: Environmental Perspective

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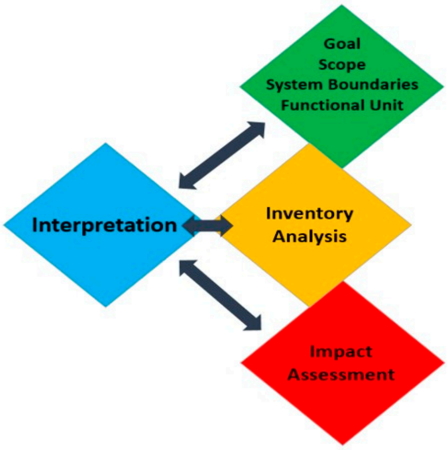

Figure S1. Life cycle assessment main components and relation.

Figure S2. Waste hierarchy with useful practices.

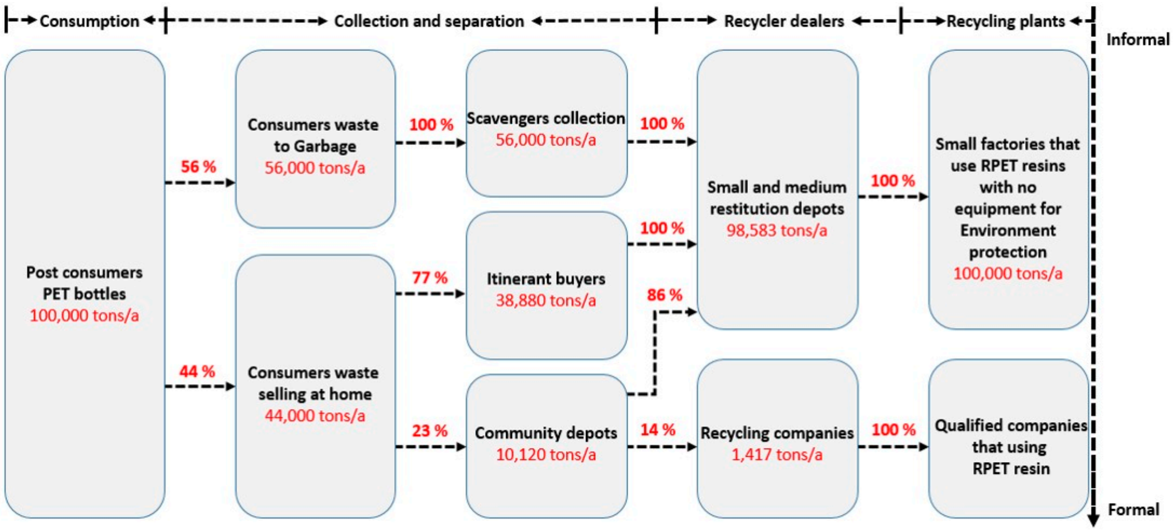

Figure S3. Material flow for Beijing, China's PET bottle recycling collection system.

Table S1. The elementary composition of the PET plastic [90].

Basic elements	**Percentage** (%)
Moisture	1.1×10^{-1}
Ash	8.0×10^{-2}
Carbon	6.0×10^{0}
Hydrogen	4.2×10^{0}
Nitrogen	0.0×10^{0}
Sulphur	6.0×10^{-1}

Table S2. Capacity of power generation from MSWI facilities in China [91,92].

Incineration type	**No. of plants**	**No. of incinerators**	**No. of turbine generators**	**Total incineration capacity** (t/d)	**Total power generation capacity** (MW)
Stoke grate	25	69	46	2.0×10^{2}	3.6×10^{2}
Fluidized bed	24	50	39	1.6×10^{4}	4.2×10^{2}
Rotary kiln + Pyrolysis	14	32	5	3.5×10^{3}	2.5×10^{1}
Total	63	151	90	4.0×10^{4}	8.0×10^{2}

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