Waste incineration of plastics (PE, PP, PS, PB); average European waste-to-energy plant, without collection, transport and pre-treatment; at plant (Location: EU-27)

Description:
The European average Waste-to-Energy plant (WtE) is defined based on the treatment of average European municipal solid waste (MSW). The thermal treatment of a single waste fraction like paper or plastic or even specific wastes like Polyamide 6 is not done in reality in a WtE plant for MSW. The waste is always homogenized to obtain a relative constant calorific value and to comply with the emission standards. Nonetheless the used model and the used settings for the average MSW allows to attribute the environmental burden (emissions and also resource consumption of auxiliaries) as well as the credits (energy and metal scrap export) to a single fraction or specific waste incinerated within an average MSW. Therefore the LCI data is valid for the treatment of the specific waste within an average MSW (the waste fraction share of the MSW is shown in the pie chart beneath, the elementary composition in the first table beneath). The following technology description explains the settings and technology of the average WtE plant used to generate the LCI data set. The net calorific value and the elementary composition of the waste fraction or specific waste are shown in the tables beneath (see corresponding column in the tables).

The data set covers all relevant process steps / technologies over the supply chain of the represented cradle to gate inventory with a good overall data quality. The inventory is mainly based on industry data and is completed, where necessary, by secondary data. Synonyms: Waste-to-energy of plastics (PE, PP, PS, PB) Technical Purpose: Standard end-of-life treatment service for a specific waste fraction via thermal treatment. Geographical Representation: EU-27

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Related resources:
Data access
Full ELCD Database
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