

Responsible battery, vape and small appliance recycling



Despite containing metal, batteries of any form must never be placed into any waste or recycling bin as they can cause fires.

A battery is a power pack of stored portable energy. It converts stored chemical energy into electrical energy by a chemical reaction. Batteries and battery-powered products are the most common causes of fires in the waste and recycling industries.

The scale of the challenge is growing. According to figures from insurer QBE, UK fire services attended 1,760 lithium-ion battery fires in 2025, equivalent to around one every five hours. This represents an increase of 147% in three years. These fires were in household bins, refuse lorries and both recycling and Energy from Waste (EfW) plants.

The danger of placing batteries in general rubbish or recycling collections becomes apparent with risk of being crushed or punctured, causing a short circuit which can lead to a fire or explosion.

If they are exposed to heat during transportation or processing, it can trigger a chemical reaction called **thermal runaway** (when the battery temperature rises uncontrollably) that can ignite surrounding waste within seconds.

There have been almost 700 injuries and 18 deaths caused by battery fires in the UK between 2019 and 2025, (source BBC), with this figure likely to increase. These battery fires are often due to rechargeable batteries, such as Lithium-ion, found in vapes, smartphones, toothbrushes etc., being incorrectly disposed of in domestic bins.

Placing batteries or battery-powered products in the waste or recycling bin has the potential to cause fatalities. Any fires will cause serious damage to vehicles and waste facilities.

Batteries can be recycled as follows:

- **A supermarket battery collection point.**
- **A Household Recycling Centre (HRC). This includes heavy-duty batteries such as car batteries. Anyone unsure whether an item contains a battery should take it to an HRC and speak to a member of staff before disposing of it.**
- **A participating retailer, such as a vape shop.**

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