

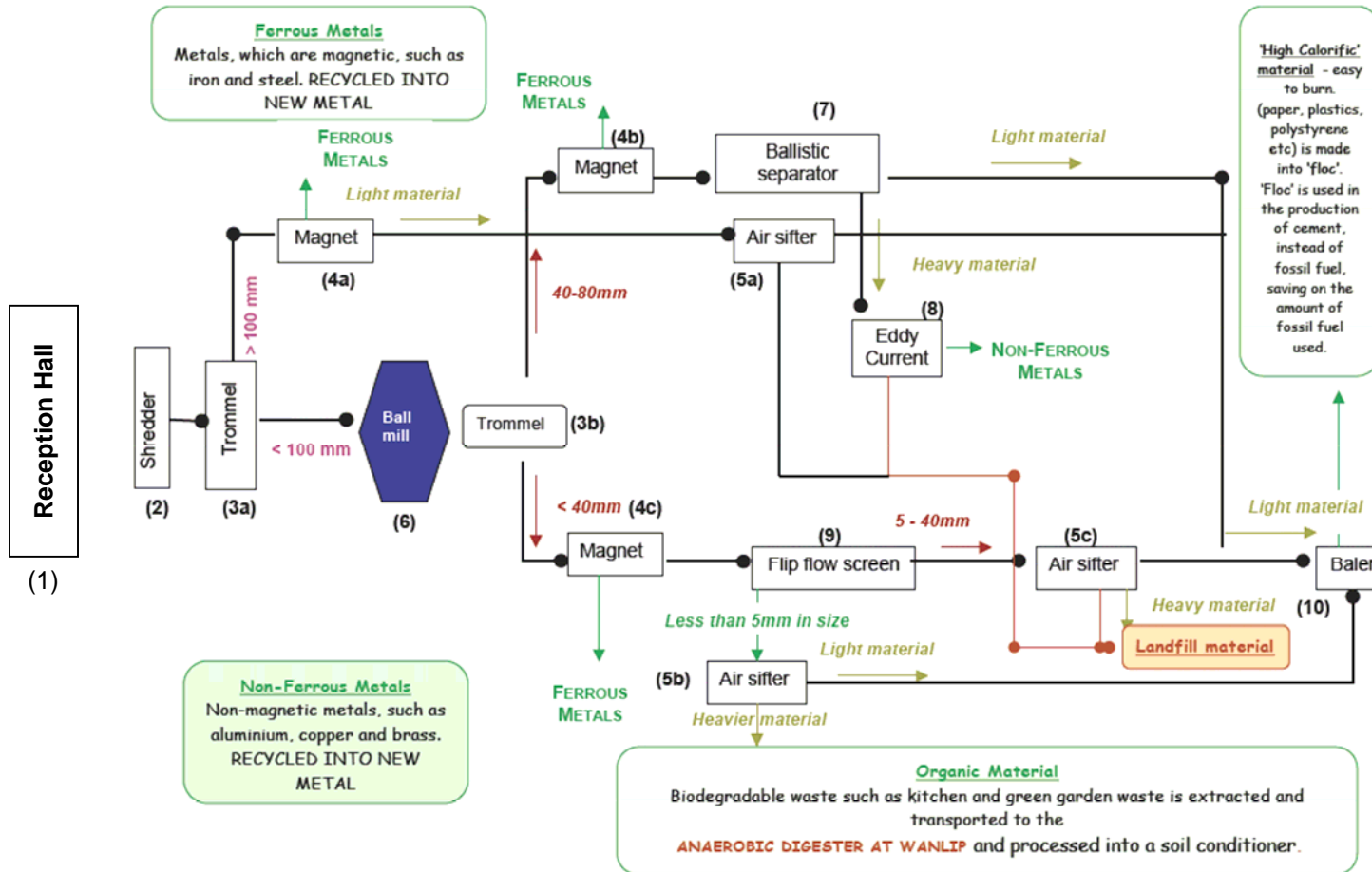
All of Leicester's household waste is initially tipped into a **RECEPTION HALL**. (1),

The waste is fed into the **BAG SPLITTER** (2) where the rubbish bags are ripped open and fed into the trommel.

The **TROMMEL** (3a) separates the waste into two sizes, waste 100mm and below, and 100mm+

**MAGNETS** (4a,b,c) separate out all ferrous metals from the waste

The waste below 100 mm is fed along a conveyor belt, into the '**BALL MILL**' (6). The Ball Mill is a large drum (like a huge washing machine drum) containing a 43 tonnes of steel balls. The drum slowly rotates causing the waste to be pulverised and ground down into smaller pieces, less than 80mm



Broken down waste is fed into another **TROMMEL** (3b) - a drum with lots of holes (40mm in size). Material smaller than 40mm falls through the holes onto a conveyor and material 40 - 80mm follows onto another conveyor belt.

A **BALLISTIC SEPARATOR** (7) sorts out lighter material (paper, polystyrene and plastics) from heavier material (glass, stones and non-ferrous metals). Moving paddles (similar to a moving floor) move lighter material forwards onto a conveyor whilst the heavier material falls back onto a different conveyor.

An **EDDY CURRENT** (8) extracts non-ferrous metals by a negative force being generated, which causes a similar force to be created in non-ferrous material. Two of the same forces repel (only opposite forces attract), causing non-ferrous metal to be flipped into a container.

A **FLIP FLOW SCREEN** (9) separates out fine organic material (less than 5mm in size) from other material, which is less than 40mm. Mats containing numerous small holes, move up and down very quickly (similar to a sieving action) causing fine organic material (<5mm) to fall through the holes and into an enclosed container, before being transported to the Anaerobic Digester at Wanlip, where it is processed into a soil conditioner. **TURN OVER FOR MORE DETAILS**

**AIR SIFTERS** (5b,c) separates the heavy material from the light material by passing the waste through an air stream. Lighter material is sucked up by a funnel (like a vacuum cleaner) onto a conveyor belt and carried down the line to the baler. The heavier material drops down onto another conveyor belt.

A smaller **AIR SIFTER** (5a) separates out any plastics from the fine organic material. Same process as above, except the organic material (heavier material) falls into a container before being transported to Wanlip to be processed into a soil conditioner.

**THE BAILER** (10) is where the material known as floc is compacted into bales. This is sent off to be used as an alternative to fossil fuel in the cement making industry.