

Transforming your waste into a resource



We can't bury the problem any longer



East Sussex and Brighton & Hove residents produce around 400,000 tonnes of waste every year. In the past, most of this waste has been landfilled, but in addition to capacity running out fast, this option is no longer the best environmental solution.

Working in Partnership

As part of Veolia's long-term integrated waste management contract with East Sussex County Council and Brighton & Hove City Council, Veolia operates 12 Household Waste Recycling Sites.

These strategically located sites ensure householders have the opportunity to reuse and recycle more waste, reducing further dependency on landfill and making a positive contribution to society and the environment.



Household Waste Recycling Sites

Turning your waste into a resource

Our friendly and helpful staff will be pleased to assist you in recycling. The range of materials that can be recycled at the sites are listed below. For information on what can be recycled at your local site please visit our website: www.veolia.co.uk/southdowns/recycling-sites

Items you can recycle	Turned into
Bric-a-brac/furniture	Donated to the reuse shops at the Household Waste Recycling Sites (excluding electricals)
Aluminium foil	Accepted with metal recycling. Metals sorted and sold back into market for new products
Car and household batteries	Car batteries – the acid and plastic are removed and recycled. Lead is processed into new ingots for the lead industry. Household (dry cell) batteries are treated to remove metallic compounds, plastic and steel cases. Remainder processed into metal alloy for further use
Cooking oil	Bio-diesel
Engine oil	Made into recycled fuel oil
Fluorescent tubes/energy saving bulbs	Tubes and bulbs are de-globed and crushed, materials separated and recycled
Fridges/freezers	Harmful material is removed and the remaining metals and plastics are sent for recycling
Green garden waste	Green waste is composted and turned into Pro Grow Soil Conditioner which is available to buy at the Household Waste Recycling Sites
Hardcore/rubble	Aggregate substitute and landfill top cover
Soil	Landfill top cover
TVs/computer monitors	Dismantled, cathode ray tubes treated, remaining materials sent for recycling
Metal items	Metals separated into different types and sold on for reprocessing into new products
Textiles and shoes	Sent to overseas aid projects/items for sale in charity shops/cleaning cloths and rags (eg mattress stuffings)
Timber/wood	Reprocessed into a material suitable for boardmaking (MDF)
Tyres	Part worn tyres remarketed, otherwise reprocessed into soft play surfaces, carpet underlay for example
Glass bottles and jars	New glass bottles and jars
Newspapers, junk mail, white paper	Newspaper, cardboard inner lining
Yellow pages	Paper
Card and cardboard	Typically made into packaging materials
Plastic bottles	A range of products including fleece jackets, sleeping bag fibre and wrappings, garden furniture, watering cans, underground mains drainage
Aluminium cans	Cans and other aluminium products
Steel cans	Cans, car parts, white goods, cycles, cutlery
General rubbish	Landfill or energy recovery
Books	Reuse or recycled
Gas bottles	Refilled and reused
MDF	Used as a renewable energy fuel
Plasterboard	Plasterboard is separated into its component materials and sent on for reuse/recycling
Shoes	Distributed to developing countries around the world or donated to charity shops
Waste electrical and electronic equipment (WEEE)	Separated into component parts for recycling





Materials Recovery Facility

The Materials Recovery Facility in Hollingdean, Brighton ensures that recyclables collected from householders by local councils in East Sussex and Brighton & Hove are sorted and delivered to reputable reprocessing companies, reducing the strain on the planet's limited resources.

The facility has the potential to process 60,000 tonnes per year

The Hollingdean facility has the capability to process up to 60,000 tonnes a year, via a modern, clean, automated plant which works by separating paper products from plastics and metals. Then the process focuses on separating ferrous materials, aluminum cans, plastic bottles, paper and card.

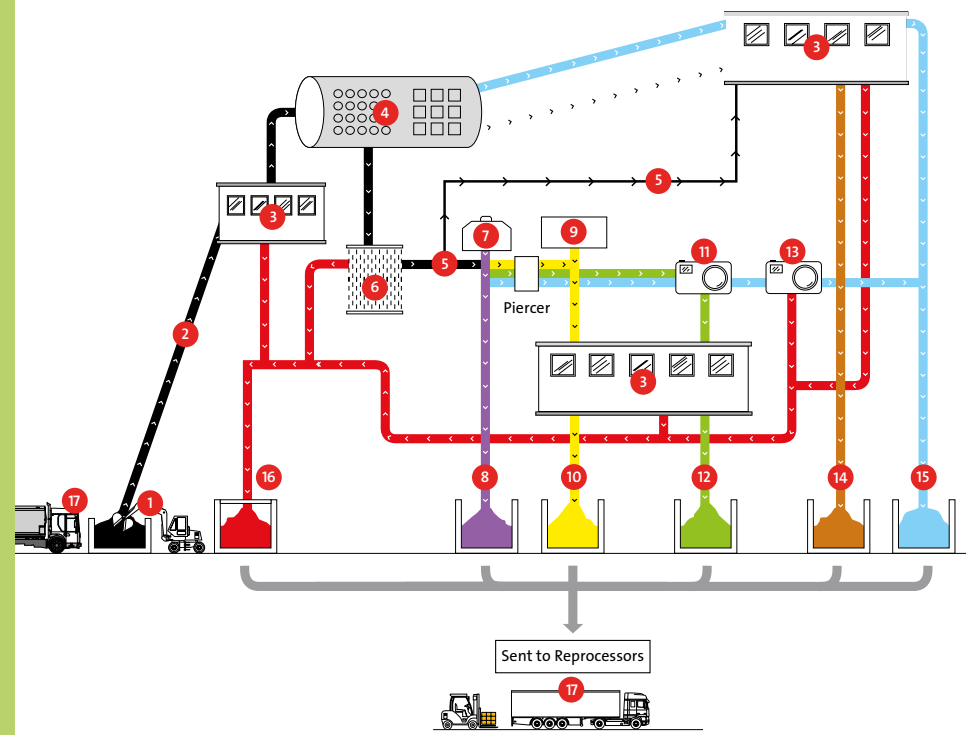
This automated system is supported by a dedicated team of operatives, who contribute significantly to the quality of the materials sent for reprocessing by removing contaminants as they pass through the plant.

Visitors to the facility are welcome, although for safety reasons age restrictions apply, for further information please contact: 01273 544205.



Items recycled here	Turned into
Newspapers, junk mail, paper	Newspaper
Card	Cardboard
Cardboard	Insulation
Plastic bottles	Fleece jackets, watering cans, street signage
Aluminium cans	Cans
Steel cans	Cans, car parts, white goods, cycles, cutlery

Material recovery: how it works



- KEY**
- 1 Bag splitter
 - 2 Material loaded onto conveyor belt
 - 3 Manual sort cabins
 - 4 Trommel
 - 5 Air knife
 - 6 Disc screen
 - 7 Ferrous separator
 - 8 Ferrous bunker
 - 9 Aluminium separator
 - 10 Non-ferrous bunker
 - 11 Plastic optical sort
 - 12 Plastic bunker
 - 13 Paper optical sort
 - 14 Cardboard bunker
 - 15 Mixed paper bunker
 - 16 Residue bay
 - 17 Vehicles in and out
 - Mixed
 - Residue
 - Non-ferrous metal
 - Ferrous metal
 - Plastic
 - Card
 - Mixed paper



In-Vessel Composting Facility

Designed to process both kitchen and green garden waste, this modern facility is capable of processing up to 60,000 tonnes a year of biodegradable waste received from local council kerbside collection schemes and via the 12 Household Waste Recycling Sites throughout East Sussex and Brighton & Hove.

In addition to the benefit of diverting more waste away from landfill, this recycling process generates a top-quality soil conditioner, contributing further to the protection of the environment by reducing the pressure on natural peat bogs.

Visitors to the facility are welcome, although for safety reasons age restrictions apply, for further information please contact: 01825 874100.

The facility produces a soil conditioner called **PRO-GROW™**

Where is PRO-GROW™ available?

PRO-GROW™ Soil Conditioner is available for purchase at a number of locations across the UK and for home delivery. To find your nearest collection point or for information on home delivery options please contact us on:

www.pro-grow.com
or **email: progrow@veolia.co.uk**



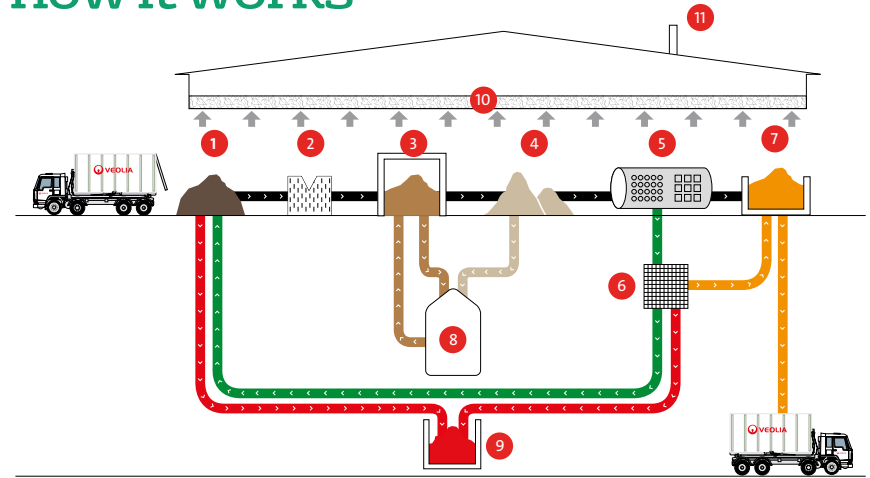
Your rubbish

Grass, prunings, leaves, fallen fruit, organic compostable kitchen waste

Turned into

Soil conditioner for use in gardens, parks and agricultural land

In-Vessel Composting: how it works



KEY

- | | | |
|-------------------|--------------------------|-------------------|
| 1 Tipping hall | 7 Storage bunker | Mixed compost |
| 2 Shredder | 8 Water treatment system | Sorted compost |
| 3 Tunnels | 9 Residue container | Matured compost |
| 4 Maturation hall | 10 Odour control system | Residue material |
| 5 Screener | 11 Chimney | Final product |
| 6 Windsifter | | Oversize material |
| | | Production line |

The biodegradable waste materials are delivered to an enclosed delivery hall where any obvious contamination is removed.

The materials are then shredded, mixed and loaded into a series of enclosed tunnels. Every tunnel acts as a highly efficient biological reactor where temperature, moisture and oxygen levels are monitored continuously to ensure optimum conditions for accelerated degradation

are met and to guarantee full batch traceability and quality control.

Air drawn from the processing areas is filtered to clean up any odorous substances in the air before being released via the chimney. Any condensate or leachate produced is re-circulated within the process.

The soil conditioner is then removed for a final period of maturation, after which it is graded and marketed. The whole process takes about 8-12 weeks.



Energy Recovery Facility

After reducing and reusing as much waste as possible, recycling and composting is always the next step. Thereafter residents across East Sussex and Brighton & Hove put out their remaining residual black bag waste, which historically has been sent to landfill. However, times have moved on and the majority of this residual waste is delivered to the Energy Recovery Facility, where it is used to produce electricity.

It continuously provides 19Mwh of power to the National Grid, thus turning waste into a resource. Even the leftover ash from the burnt-out waste is useful – it is sent by train from the facility for recycling into building materials, including road aggregates.

A computerised system continuously records the emissions for monitoring purposes to ensure that the Energy Recovery Facility meets the stringent emissions limits required by Industrial Emissions Directive (IED), formerly the Waste Incineration Directive (WID), which is regulated by the Environment Agency. To view these figures please visit: www.veolia.co.uk/southdowns/emissions-expertise

Visitors to the facility are welcome, although for safety reasons certain restrictions apply, for further information please contact: 01273 511324.

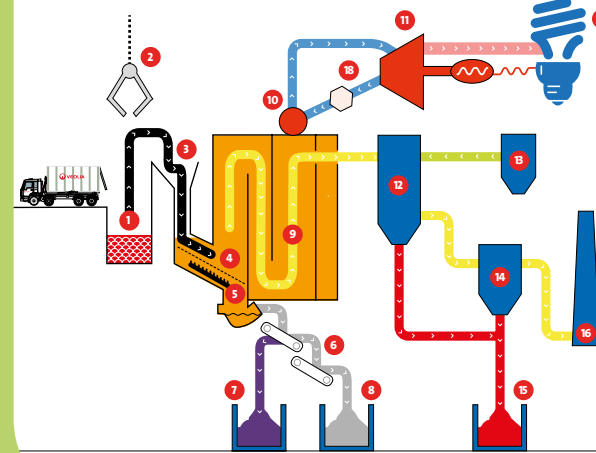
Your rubbish

Residual black bag waste

Turned into

Electricity (power and light)

Energy recovery: how it works



KEY

- 1 Waste Bunker
- 2 Crane & Grab
- 3 Feed Hopper
- 4 Furnace
- 5 Grate
- 6 Ash Handling System
- 7 Metal Extraction for Recycling
- 8 Inert Bottom Ash (IBA)
- 9 Boiler
- 10 Steam Drum
- 11 Turbine & Generator
- 12 Flue Gas Scrubber
- 13 Lime & Carbon
- 14 Filtration (BHF)
- 15 Residue for treatment (APCr)
- 16 Chimney Stacks
- 17 Electricity Generation
- 18 Air Cooled Condenser

- Waste
- Metal
- Steam
- Lime & Carbon
- Bottom ash
- Flue gas
- APCr
- Electricity

The residual black bag waste is moved by a crane grab and fed onto the grate, where high volumes of air are used to aid combustion in the burning process, which produces heat that raises the temperature of the water in the boiler. The steam that is created feeds the turbine.

The flue gases which leave the boiler are treated first in the scrubber to neutralise them, then in the filtration unit to remove dust particles before exiting the chimney stack as clean gas, dispersing into the atmosphere. Residues (APCr) removed in the flue gas cleaning process are recovered and sent for further treatment.

The ash from the boiler is transported via a conveyor system to a storage bunker where metal is removed during the process by a large magnet, both the metal and ash are sent for further recycling.

Power is produced by a generator connected to the turbine, with the electricity produced being sufficient to power around 25,000 homes via the National Grid.



Haulage

The role of Haulage is to offer a reliable, efficient and cost effective way of transporting waste and recyclables between the point of source or transfer and final disposal/treatments facilities, whilst minimising environmental impact.

Veolia South Downs' Haulage department operates over 25 specialised vehicles. Many of these vehicles are operational 362 days a year.

The fleet is modern and well maintained thus ensuring good fuel efficiency and low level emissions.



Vehicle weights are constantly monitored to ensure that the maximum possible legal weight is achieved thus minimising the number of journeys that each vehicle needs to make. Vehicle routes are established and reviewed on the pretext that distance travelled is minimised but not at the cost of the local environment. Major traffic routes are therefore utilised wherever possible.

Waste Transfer Stations



There are five waste transfer stations in East Sussex and Brighton & Hove, some of which share the same site as other waste processing facilities. Each waste transfer station is designed to receive residual household waste, dry recyclables and street cleansing waste.

Firstly, they are delivery points for local waste collection vehicles, ensuring more time is spent by the local council's resource in delivering their services than travelling long distances to unload.

Secondly, the delivered material is then transferred onto much larger vehicles, capable of transporting up to four times as much as a kerbside collection vehicle. This transfer delivers a significant reduction in the amount of vehicle miles needed to move the waste, thereby reducing local traffic and the associated environmental impact.

The vast majority of residual waste material is sent to an Energy Recovery Facility with the remaining small proportion sent to landfill. Recyclable material is either sent to a sorting facility or direct to the appropriate reprocessor for recycling, such as glass.

Our range of business collection services



From standard containers or a skip to something more sophisticated, such as compaction and baling facilities, we have the infrastructure, experience and knowledge to give commercial customers the peace of mind they need.

No matter how big or small your business is, we also offer a full range of waste recycling solutions and value-added services within East Sussex, including:



Start recycling today and contact us for:

- Competitive prices
- Your free recycling and waste audit
- Expert advice – ensure you're compliant
- A service that suits all needs

Call: **0845 60 60 460**



Paper and Cardboard Recycling



Co-mingled Recycling



Food Recycling



Glass Recycling



WEEE and Packaging Recycling



Battery Recycling



For further information and updates
on progress or to be put on our mailing list,
please visit our website:
www.veolia.co.uk/southdowns

Veolia can supply the details of this
document in large print.
Please contact: **info@veolia.com**
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