Why some materials and not others in your recycling bin?

What are the target materials for Northumberland recycling bins?

The materials which Northumberland currently target for recycling through the kerbside bins are: paper, card and cardboard, food and drink cans, aerosols and plastic bottles with or without lids. If it's not on this list it shouldn't go in the recycling bin - so if in doubt leave it out!

Why do you ask for items to be put loose in the recycling bin rather than in bags? Refuse collection staff need to be able to see that the correct materials have been placed in the recycling bin before it is emptied. They can't do this if materials have been bagged up. Also, sorting of the materials is carried out by a mixture of manual and mechanical means. These are both more efficiently carried out when the materials are presented loose on the conveyor belts.

What grades of paper and card are acceptable?

All grades of paper and card are wanted for recycling. If you have heavy brown cardboard in large boxes or sheets then it is better if these can be ripped up simply to avoid them becoming jammed in your bin on collection day. Birthday and Christmas wrapping paper is acceptable providing it passes the 'scrunch' test i.e. when scrunched in your hand it should remain in a ball otherwise it isn't paper. We do not want wrapping paper if it is adorned with glitter / sequins etc as these contaminate the paper recycling process and should instead be disposed as waste in the general household waste bin.

How do I carry out the wrapping paper scrunch test?

You can check whether you paper is actually paper - and therefore recyclable - or whether it is plastic and/or foil based. Squash the paper into a small ball in your hand. Open your hand. If it keeps its ball shape then it can be recycled as it is paper. If it bounces back outwards then it has a high content of foil or plastic so it should be put in the rubbish bin, where it will be sent to our Energy from Waste facility and burned to make electricity. (See note later about Energy from Waste).

Why not shredded paper?

Paper mills have a preference to buy recyclable paper that doesn't contain shredded paper as the action of shredding shortens the cellulose fibres and results in a need to add a higher proportion of virgin pulp to it to make a new paper product - resulting in a higher cost to them.

Our sorting plant uses a trommel at the front of the process, which is basically a large rotating sieve, to separate out the different materials by their size. This means that small items, such as shredded paper, are removed as contamination and disposed of as waste at the start of the sorting process. Any shredded paper that manages to pass across the trommel then tends to drop between conveyor belts creating a fire hazard within the facility. We therefore advise residents to only shred the confidential part of a document and to recycle the rest.

What should I do with my shredded paper?

Keep shredding to a minimum (see previous advice), then place the little bit of shredding you do have in your home composter by mixing it with the green waste (grass cuttings etc) to get a better carbon: nitrogen mix and improved compost. It is better NOT to use printed paper and news for pet bedding as the ink on it may be harmful to them.

Why food and drink cans and not other metals?

The metals that the sort plant at West Sleekburn is designed to take are all food and drink cans and aerosols. Other metals should be recycled via the Household waste recovery centres, where there is a metal skip. Pots and pans, knives, ironing boards and engine blocks have unfortunately been sent to the plant previously hidden in the bottom of residents recycling bins. These cause damage to the sort equipment and some items pose a safety risk to the operatives there. Our sorting facility uses state of the art equipment to separate ferrous metals from non-ferrous metals - this means we can split out the aluminium cans/aerosols from the steel ones. These are high value materials with stable end markets that can be recycled over and over again into new products.

Do I need to rinse my cans before recycling them?

Yes please, as by remembering to empty and rinse the cans you avoid the risk of foodstuffs contaminating the paper in the recycling bins. Clean and drip dry cans also reduce the energy required by reprocessors when melting them down to create new products.

Can aerosols be recycled safely?

Yes, providing they are empty of gas and liquid. Otherwise they should be put in the general rubbish bin. If they have a plastic top which easily comes off, then these should be removed and the plastic top put in the general rubbish bin for disposal.

Can I put foil in the recycling bin?

Foil wrap and foil trays are difficult for the plant to sort from paper and a frequent cause of contamination because of the difficulty residents have in cleaning them adequately. It is better therefore that they are not put in the recycling bin. Residents are advised to put them - unwashed - in with the general rubbish where they will be sent to the Energy from Waste plant. The energy recovery process creates a bottom ash from which the aluminium and steel can then be extracted for re-use.

What kinds of plastic should I put in the recycling bins?

Northumberland County Council only targets plastic bottles - any colour - for the recycling bins. By keeping the message simple - bottles only - it ensures that we recover high grade plastic materials (PET and HDPE) that have stable end markets within the UK. It also avoids the need for checking for numbers and arrows and for washing out pots tubs and trays, which are made from low-grade plastics for which there is currently little demand from reprocessors in the UK. Pots, tubs and trays if not properly cleaned also pose a contamination risk to the paper and the flat shapes also create contamination problems within the sorting plant as they can become trapped in the newspapers.

What numbers should I look for on plastic bottles?

There is no need to look at the numbers on plastic bottles to check what they are made from - we simply ask that residents only put plastic bottles in their recycling bins - these can be milk, soft drinks, water, detergent, shampoo and even trigger bottles used for cleaning products (as the triggers are now all designed to be recyclable). If it's a plastic bottle - put it in the recycling bin - if it's not a plastic bottle leave it out.

Do I need to take tops off plastic bottles?

The latest advice to residents is that the tops can be left on the plastic bottles. In the past they were made from a lower grade plastic so they were not a target material. Manufacturers have addressed this issue and have changed the grade of plastic for the lids so that it matches the bottle. In addition, the safety hazard of flattening bottles and lids flying off under pressure has been addressed by the introduction of a piercer in the sorting plant.

Do I need to rinse my plastic bottles before recycling?

Plastic bottles should be empty and preferably clean before recycling to avoid contamination of paper.

Do I need to take the tops off aerosols

Easily removed push tops and caps should be placed in the rubbish bin to enable them to be burnt at the Energy from Waste plant to make electricity. They are not wanted by scrap merchants within the cans and aerosols.

Are jam jar lids wanted in the recycling bins?

A magnet is in place at the sort plant which will successfully extract metal lids for recycling, so Yes please put them in your recycling bin - but recycle the glass jar in a local glass bank. Plastic jam jar lids are not wanted in the process so put them in your rubbish bin.

Why do other local authorities recycle pots, tubs and trays and Northumberland chooses not to? Who is right?

Northumberland County Council only targets plastic bottles in it's kerbside household waste recycling service as these containers are made of HDPE or PET which are easily recyclable, have high value with stable end markets in the UK and Europe. We do not target low grade plastic packaging waste such as the plastic films, pots, tubs and trays which were recently featured in the BBC 'War on Plastic' programme, as these are made of a wide range of polymers, are often contaminated with food waste and have a low value and limited end markets, particularly since China imposed import restrictions on these materials in 2018. It is these types of low grade mixed plastic packaging materials which are now often exported to countries in South East Asia for reprocessing. In Northumberland these types of materials should be placed in the residual general waste bin, the contents of which is then used as a fuel at our Energy from Waste facility which generates 9.6MW of electricity per annum to the National Grid.

Do I need to take labels off cans and bottles?

Residents are not expected to remove labels from cans and plastic bottles.

Can I put textiles and clothes in my recycling bin?

No thank you. Some of the previous district councils accepted clothing and shoes in the recycling bin in the past. These have NOT been wanted in the recycling bins for a number of years, and residents are asked to donate them to Charities and Clothing Banks from where they will be re-used as clothing or recycled into other items such as car body interiors.

Can I put glass in my recycling bin?

No thank you. Residents are asked to recycle their glass bottles and jars by taking them to their local Bring site. The locations of these can be found online on the waste page www.northumberland.gov.uk/waste and click on the 'find local recycling points' marker. By keeping the glass out of the recycling bin we can ensure that the paper is not contaminated with glass shards and that the clear glass is kept segregated from the coloured, therefore giving it the best chance to be re-melted into clear bottles and jars. The coloured glass (brown and green) can be used for re-melt or, depending upon the markets can be recycled into a range of other products such as glass fibre insulation, or as an aggregate for use in the construction industry.

Why does Northumberland not have glass collected at the kerbside using a separate container?

Some neighbouring authorities collect glass at the kerbside using a caddy which sits within the top of the recycling bin. This method relies on the use of a dedicated fleet of split compartment vehicles as the glass is collected at the same time as the other recyclable materials. In Northumberland we currently operate a single fleet of refuse collection vehicles that are able to collect recyclable waste one week and the same vehicle and crew then collect residual waste for disposal the following week, with glass having to be taken by households to their nearest 'bring' recycling centre. This approach makes environmental and economic sense in a large rural county such as Northumberland, but is less convenient for residents. Consideration is currently being given to the most appropriate way to introduce kerbside glass recycling collections in Northumberland and it is intended to run a pilot scheme for kerbside glass recycling later in 2019/20.

Does the council make money from recycling?

The council entered into a 28 year Private Finance Initiative (PFI) Waste Management Contract with Suez in 2007. Under the PFI Contract NCC pass the waste it collects to Suez for energy recovery or disposal, and the recycling materials to process, sort and sell-on to end users. The PFI Contract rates are based on Suez achieving an assumed level of income any revenue made from the recycling materials over this agreed threshold is retained by the County Council, with Suez being incentivised to maximise the returns achieved. Any income from the sale of recyclable materials helps to offset the overall cost of providing the waste service, which represents a significant net cost to the County Council of ~£25m per annum.

Why does Northumberland not collect food waste at the kerbside for recycling?

When developing the Northumberland Municipal Waste Strategy 2003 -2020, consideration was given to collecting food waste for recycling. However, at that time there was little public support for such a service and it was also not considered to be affordable given the

significant capital investment required in new receptacles, vehicles and waste processing facilities and the considerable on-going revenue costs of operating such a service. The focus of the Waste Strategy was therefore to promote waste avoidance/minimisation and improve the recycling, composting and energy recovery arrangements so that landfill disposal was the option of last resort.

The County Council continues to support food waste avoidance through the national 'Love Food Hate Waste' campaign by the Waste Resources Action Programme (WRAP) that encourages households to plan their meals, avoid over purchasing and to reuse any leftovers.

Are there any plans to collect food waste in the future in Northumberland?

Detailed modelling of different options for the collection and processing of food waste via anaerobic digestion is currently being undertaken as this is the most environmentally sustainable way of dealing with food waste and offers the opportunity to deliver a 'step-change' in our overall recycling performance to +50%. It is also envisaged that the separate collection of food waste will become a legal requirement in the future with the Government having recently consulted upon this, so it is sensible to determine how best this can be introduced in the County so that we are able to develop well informed and robust bids for funding support. This modelling work is being carried out with the assistance of WRAP.

What happens to the rubbish from my doorstep?

All waste collected in the rubbish bins at the kerbside (ie. not the recycling bins) is taken, unsorted, to an Energy from Waste plant at Stockton where it is used as a fuel to generate electricity for supply to the National Grid. Our waste generates 9.6MW of electricity, enough to power a town the size of Morpeth for a whole year.

Why do we transport rubbish all the way to Stockton on Tees rather than have an Energy from Waste plant in Northumberland?

A feasibility study was carried out as to whether there was enough waste generated from Northumberland homes and businesses to justify a stand-alone Energy from Waste plant. It was concluded that a Northumberland plant could not be justified and that it was environmentally and economically more advantageous to add capacity to a plant that was already up and running in Stockton on Tees. These advantages took into account the transportation of waste to that destination.