

# THE LEEDS RECYCLING AND ENERGY RECOVERY FACILITY FACT FILE 5:

## The Circular Economy

The Leeds Recycling & Energy Recovery Facility (RERF) formally opened in 2016 as a high quality, innovative building, located on the site of the former Cross Green wholesale market in east Leeds. Standing at 42 metres high and 150 metres long, this award-winning, landmark building is highly visible in the city and incorporates a visitor centre providing local schools with an education resource to support learning about waste, recycling, energy and the environment.



Schools have a key role in contributing to Leeds' ambition to be a 'zero waste' city as waste from UK primary and secondary schools totals around a quarter of a million tonnes each year, equivalent to 185 double decker buses every school day!

## A circular economy describes an alternative to the more traditional linear economy that typically takes, makes, uses and disposes of resources.

A circular economy tries to keep resources in use as long as possible, and, while in use, attempts to extract the most value from them; recovering and regenerating products and materials at the end of their useful life. The 6 Rs of sustainability underpin the circular economy and provide a useful checklist as follows:

### RETHINK

our current lifestyles and the way we design and make things – is it really necessary?

### REFUSE

to buy materials and products that harm the environment and are unsustainable.

### REUSE

the product for something else so you don't need to throw it away.

### REDUCE

the amount of energy and materials used to make a product.

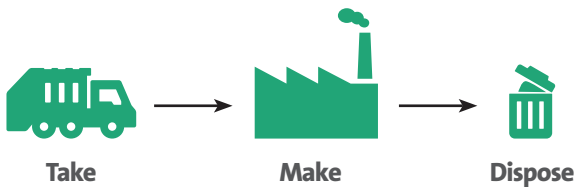
### REPAIR

the product so you don't need to throw it away.

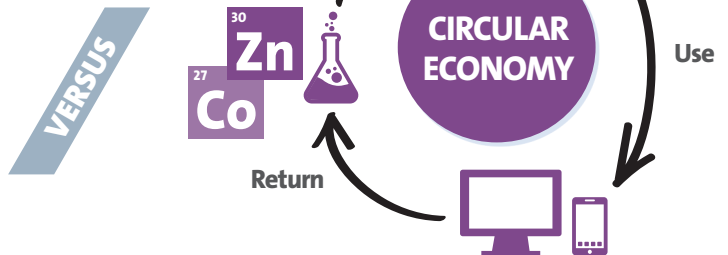
### RECYCLE

by taking the product apart ready to be used in another product.

## Are we today throwing away the resources of tomorrow?



### LINEAR ECONOMY



A significant contribution to achieving Leeds' ambition to become a zero waste city will be moving more to a circular economy. This has, in part, been achieved by stopping sending Leeds' household waste to landfill and encouraging residents to reduce their consumption, reuse items where possible or recycle using the green bin recycling scheme. Promotion of a circular economy benefits the city as it lends itself to boosting jobs, protecting the environment and improving people's health and wellbeing.








working in partnership





Moving to a circular economy is important because, as well as creating opportunities for growth, it can help to:



- 
**Reduce the overall amount of waste** produced in the first place
- 
**Improve** greater use of our **resources**
- 
 Contribute to making the **UK economy more competitive**
- 
 Help the UK to better address **emerging resource security/scarcity issues in the future**
- 
**Help to reduce the environmental impacts** of production and consumption both in the UK and abroad

The Leeds RERF makes a direct and significant contribution to the circular economy through separating valuable materials from waste and sending them on for re-processing into new materials. The waste that remains after this process undergoes a specialised combustion process to reclaim even more value in the form of electricity that is transferred to the National Grid and heat supplied to the Council's district heating network.



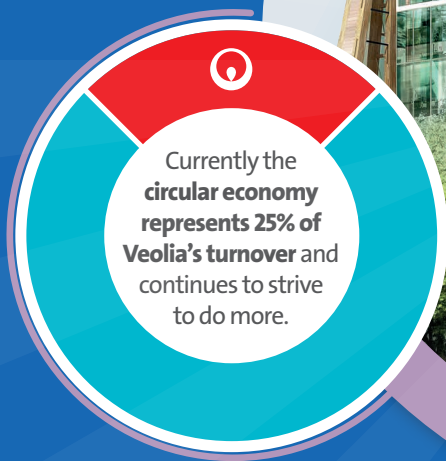
The RERF can power up to 22,000 homes via the National Grid on an annual basis.



The Leeds RERF separates out ferrous and non-ferrous metals to go on to be made into new things.



Once the metals have been separated they are sold on to other companies to be made into more, new and useful, things e.g. metal cans can be made into a child's scooter.




The World Economic Forum has forecast that by 2025, the circular economy will contribute over \$1 trillion globally every year.

- Curriculum links**
- National Curriculum **Design and Technology**
  - National Curriculum **Citizenship**
  - Programme of Study for **PSHE Education** (non-statutory)