

Key Term	Definition
Incineration	The destruction of waste material by burning it.
Circular waste system	Waste is seen as a resource opportunity rather than a problem. It involves products being made so that they can be easily and cheaply repaired or updated and are made out of materials that can eventually be totally recycled.
Waste reduction	The practice of using less material and energy to minimize waste generation and preserve resources.
Landfill	The disposal of waste material by burying it.
Sustainable	Something that meets the needs of the present without causing issues for future generations to meet their needs.

### Figure 1 - managing waste in the UK

- \* Construction and demolition produced the most waste in the UK in 2018
- \* Food waste in the UK is increasing and the average family throw away £800 food a year
- \* 45% of all UK waste is disposed of by landfill
- \* 45% of all UK waste is recycled but this varies e.g Newham London recycles only 14%
- \* Rates of recycling in the UK are slowing since 2010
- \* The UK exports most of its plastic waste to LICs and NEEs leading to water pollution
- \* Products are starting to be made so they can be cheaply repaired or updated for a circular waste system

### Figure 2 - Proposed energy from waste incinerator for Cambridge

- Amey waste services wants to build an incinerator at their existing waste management site
- + 80% of waste currently landfilled could be incinerated
  - + it creates electricity for 63,000 homes
  - + 300 jobs created
  - Increased levels of air pollution which would harm the health of locals
  - Increased CO2 emissions contributing to greenhouse effect
  - Will discourage recycling, wasting valuable resources

Figure 3 - A waste incinerator for Cambridge - a burning issue!

Arguments FOR the Incinerator	Arguments AGAINST the Incinerator
<ul style="list-style-type: none"> <li>+ Incineration is very efficient and reduces need for landfill which is running out of space and sites in the UK</li> <li>+ The incinerator will reduce the need to transport waste further away via big lorries to landfill sites</li> <li>+ It can produce heat and electricity for homes and industry</li> <li>+ It produces less air and ground pollution than landfill and less bad smells</li> <li>+ Incineration can destroy harmful germs and chemicals found in our waste</li> <li>+ There are strict environmental laws in the UK about incineration plants</li> <li>+ It will create local jobs and the local economy through the local multiplier effect</li> <li>+ The site will be landscaped to make it look more visually attractive</li> </ul>	<ul style="list-style-type: none"> <li>- The incinerator will be visually unattractive with its huge 80 metre tall chimney seen for miles ruining the views, distracting tourists to the area and causing visual pollution</li> <li>- Increased traffic on local roads and the main A10 with lorries bringing waste to the incinerator from neighbouring settlements causing noise and air pollution too</li> <li>- Reduces the need for people to recycle and reduce their waste putting pressure on valuable resources and is unsustainable</li> <li>- Produces dangerous pollutants as the toxic fumes are dangerous to people's health and the environment</li> <li>- The incinerator will be expensive to build and running costs are high making this method of waste disposal expensive</li> <li>- Incineration ash can be dangerous if not carefully managed</li> </ul>



What do you think? Weigh up both sides of the arguments



### Exam Question Practice: [6 marks]

The proposed energy from waste facility will provide an alternative to landfill and create sustainable and affordable energy burning waste. To what extent do you agree with this statement?

### Decision Question Practice [9 marks]

The government rejected the proposal to build the waste incinerator plant. To what extent do you agree with that decision?