

GCSE GEOGRAPHY

Resources for Paper 3 Geographical Applications

June 2022

Pre-release resources booklet

This booklet contains three resources as follows:

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- Figure 3 – A waste incinerator for Cambridge – a burning issue!: pages 6–7

Information

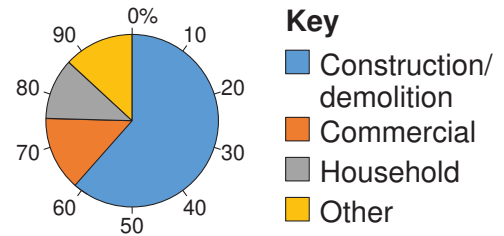
- HIC is a higher income country.
- LIC is a lower income country.
- NEE is a newly emerging economy.

Figure 1

Managing waste in the UK

The growing waste challenge in the UK

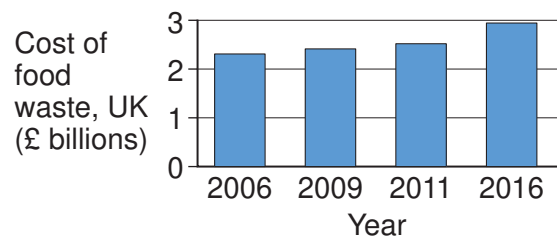
In 2018 the UK produced approximately 225 million tonnes of waste. The construction and demolition industry produced the most – about 140 million tonnes. Households generated approximately 27 million tonnes of waste, mainly made up of cardboard and packaging, paper, glass bottles, plastic and food waste.



Food waste in the UK

It is estimated that each person in the UK throws away between 15% and 20% of all the food they buy, costing an average family £800 a year.

- Each person throws away 69 kg/year
- 1 in 6 meals in hospitality/catering is wasted



Waste disposal in the UK

Within the UK there are a number of methods used to manage waste, including:

Landfill – Each year approximately 45% of all UK waste is disposed of by burying it in landfill sites. This includes household, commercial and industrial waste. There are over 500 landfill sites in the UK, many of which will be full within the next few years.

Incineration – The burning of waste which can be used to heat water and generate electricity. A number of older incinerators are now being shut down because of pollution issues.

Recycling – Converting waste into re-usable materials. In England, between 2000 and 2010 the recycling rate increased by approximately 30%. More recently this increase has slowed and the overall recycling rate is less than the 2020 EU target of 50%.

Anaerobic digestion – The breakdown of organic matter by biological agents. The process creates fertiliser and methane. The methane can be used to generate electricity.

Composting – Organic waste, such as garden or food waste, can be composted and treated to produce soil conditioner.

Slowing recycling rates blamed on a lack of understanding

Waste company Biffa has asked for more clarity about recycling, saying that inconsistency and confusion in labelling, sorting and collecting are preventing waste being recycled. The government's Resources and Waste Strategy aims to recycle at least 65% of all waste by 2035, but currently the rate is just over 45%, largely because of a lack of investment in recycling plants. The Chief Executive of Biffa said, "We need a system that is easy to use and cost effective, with increasing use of recyclable packaging and clearer labelling for consumers."

Recycling household waste

Rates in England by local authority 2017/18

- 51% or more
- 41% – 50%
- 31% – 40%
- 30% or less

Overall UK rates

Wales	62.7%
N. Ireland	48.1%
Scotland	45.6%
England	45.2%

49%

of UK councils provide recycling bins in parks and other public spaces

1.3bn

ultra thin fruit and veg produce bags given out by UK supermarkets every year

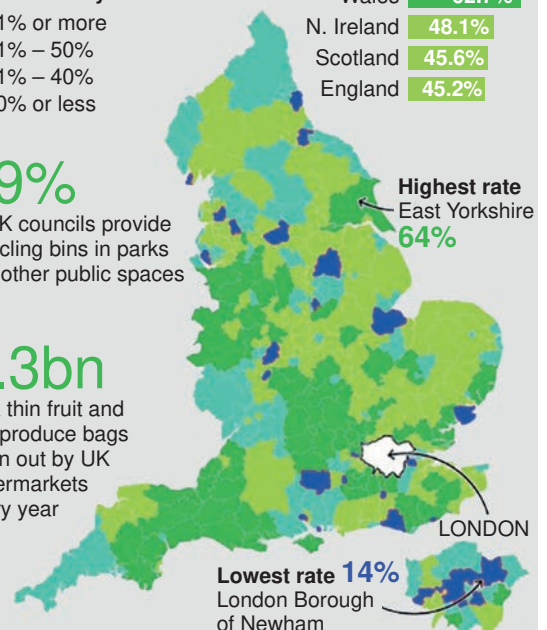


Figure 1 continued

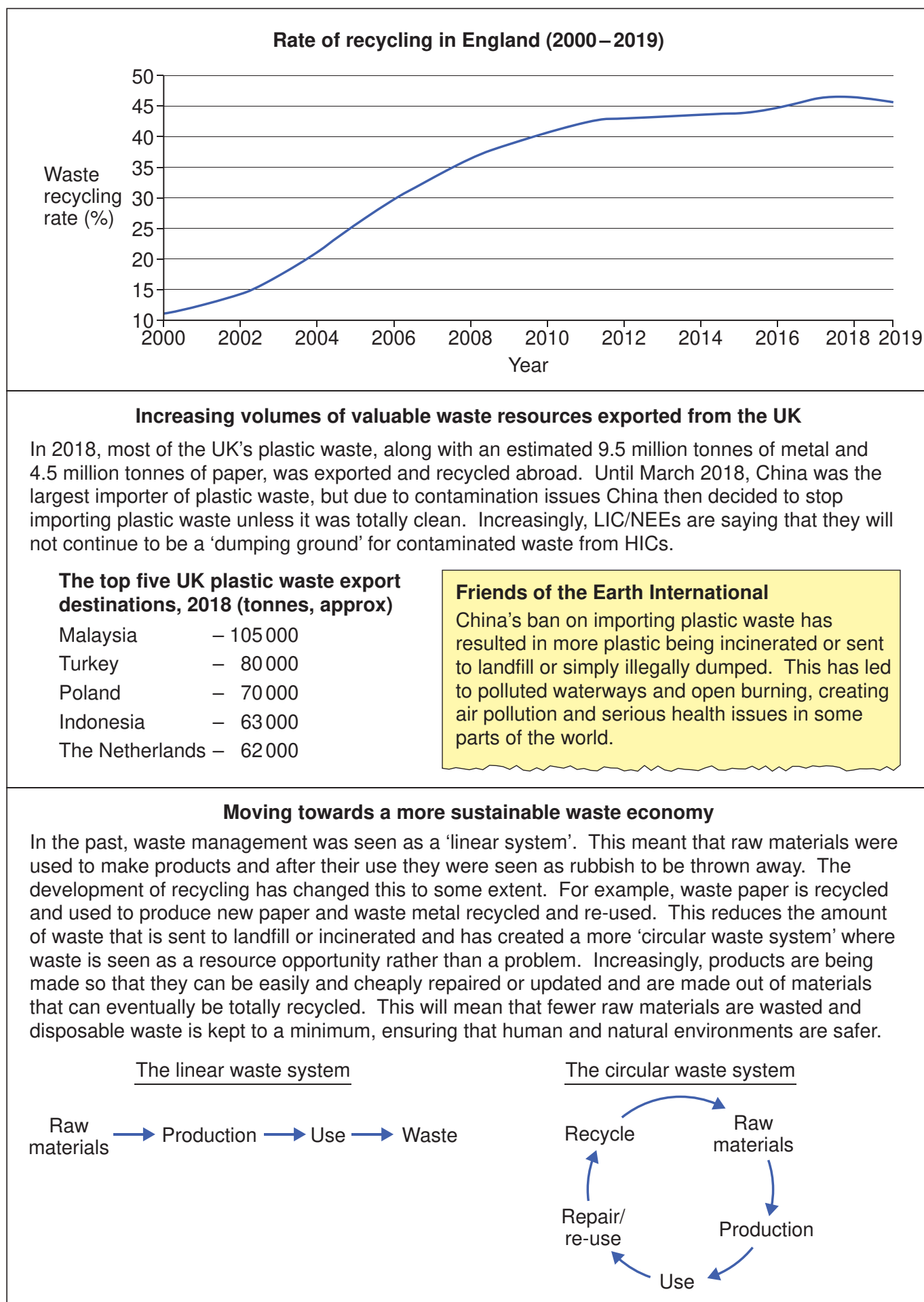


Figure 2

Proposed energy from waste incinerator for Cambridge

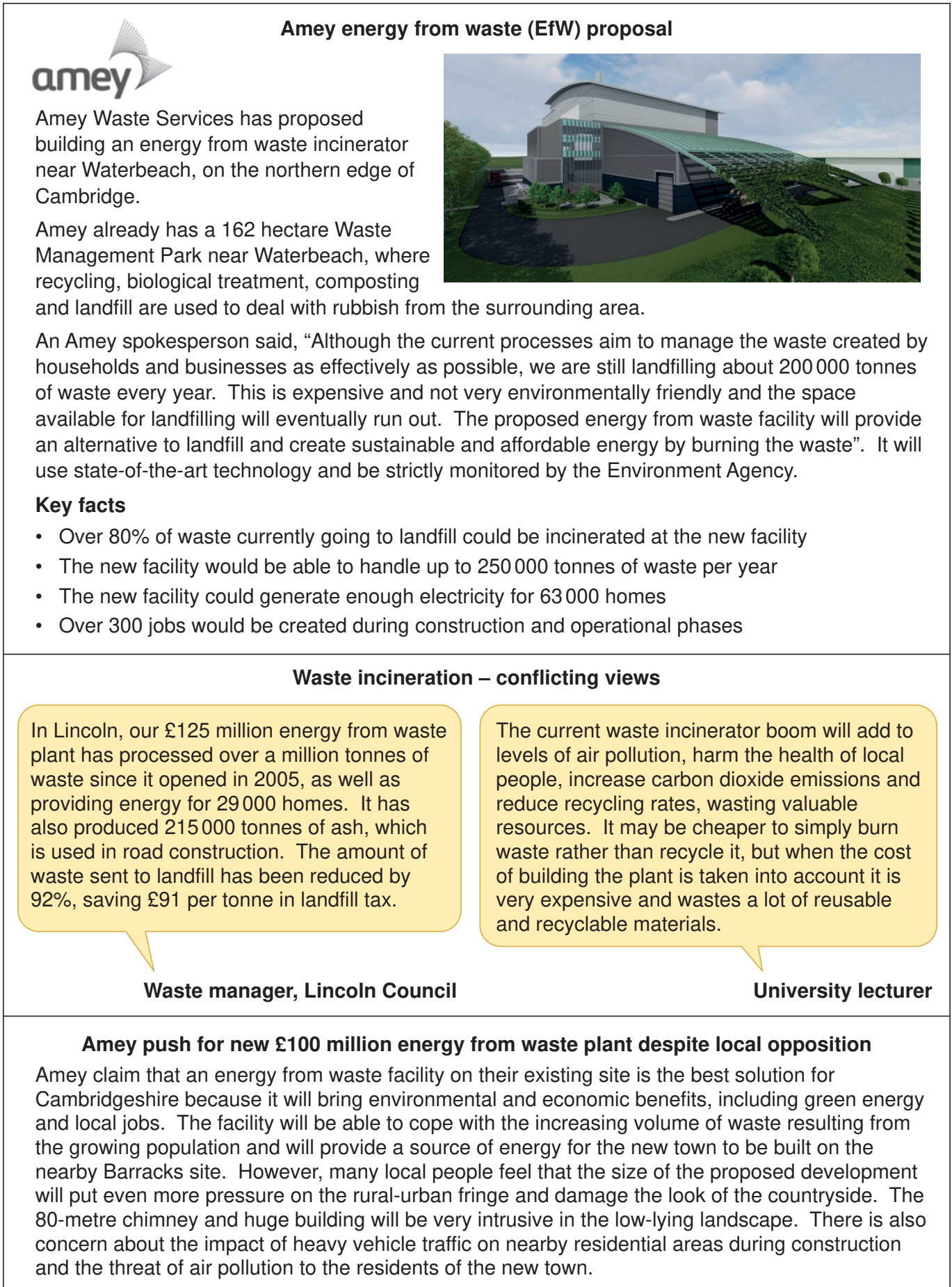


Figure 2 continued

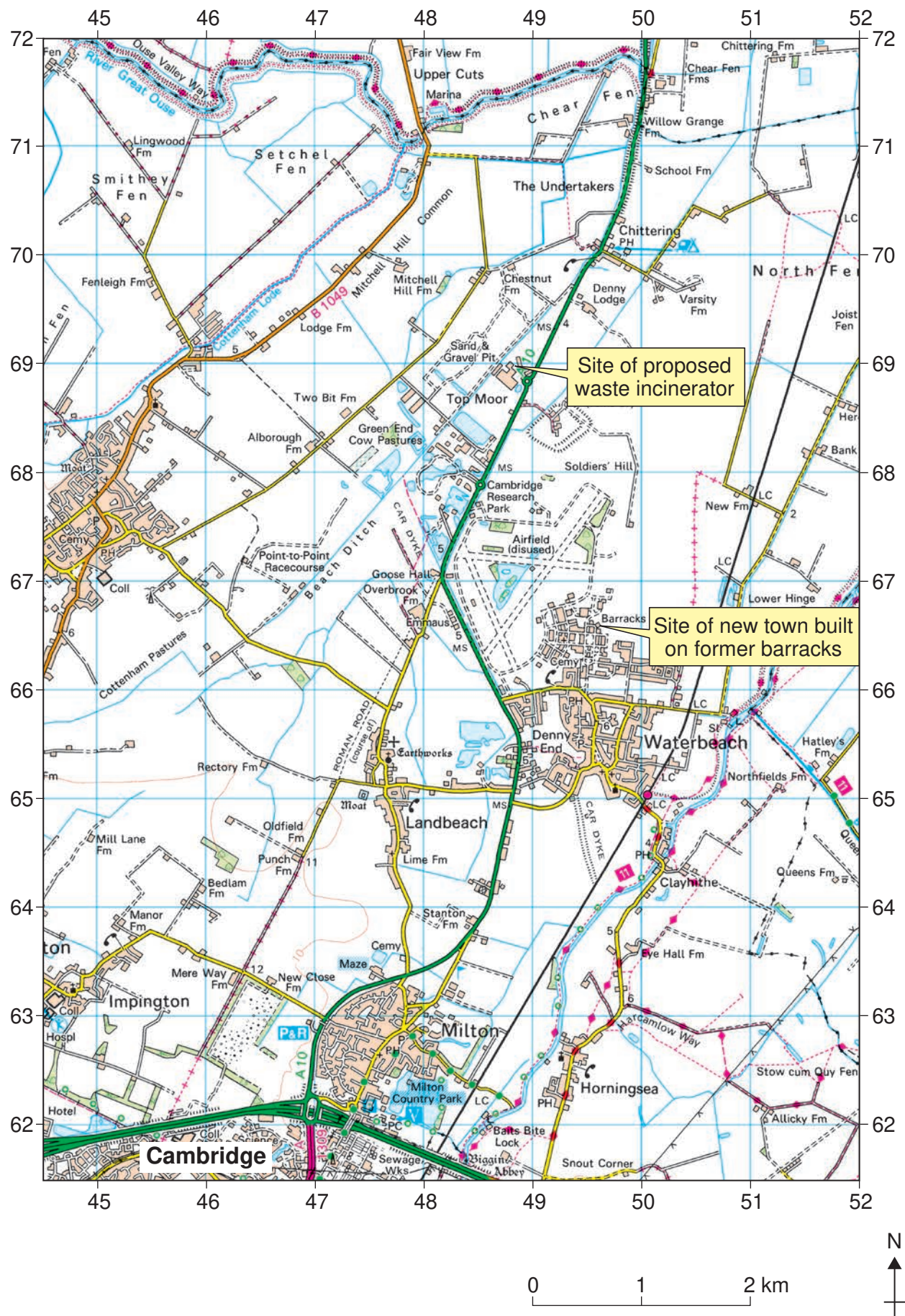


Figure 3

A waste incinerator for Cambridge – a burning issue!

Myths about incineration not reproduced here due to third-party copyright restrictions

Amey push to win planning battle for energy from waste plant

Amey Waste Services are pushing to get permission to develop a waste incineration plant on their existing Waste Management Park, alongside the A10 near Waterbeach. They claim that because the plant is within the boundary of the existing site and is next to the main road no additional land will be required and minor roads in the area will not be affected.

Currently, a high proportion of waste goes to landfill, but the existing landfill capacity will soon be full. If the incinerator is not built waste will need to be transported much further to alternative landfill sites.

Supporters of the proposed incinerator feel that it will improve the local environment because of the decrease in landfill and may also increase recycling rates. In addition, the strict environmental guidelines will mean that air pollution will not be a problem. The jobs created during construction and when the plant is operational will be a significant boost to the local economy.

The managing director of the Waste Management Park said, “The incineration plant is a sustainable solution for dealing with present and future waste needs. It will benefit the whole county and will generate wealth for the local community. It will supply electricity to thousands of local homes and will reduce the carbon footprint.” Amey have said that they understand the concerns of local residents and will work to ensure that the site is landscaped in order to reduce the visual impact.

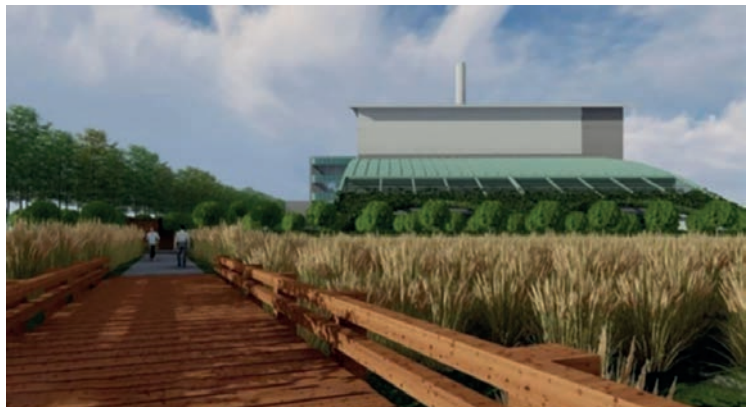


Figure 3 continued**Waste incinerator will dominate the landscape and ruin the views of Ely Cathedral**

The proposed waste incineration plant will completely dominate the surrounding countryside, which is largely made up of small rural settlements. The planned building is 141 metres in length and 91 metres wide, with a chimney 80 metres tall. This is much higher than any local buildings and will harm the visual amenity of the area. It is very close to Denny Abbey and the Denny Farmland Museum, a listed building and a tourist attraction visited by many people throughout the year.



To keep the incinerator going will require huge quantities of waste which will be brought in from a wide area, adding a significant amount of heavy traffic to a road system that is already under pressure. 'Cambridge Without Incineration' said that they also had concerns about how close the proposed incinerator was to the new town at the former Barracks site in Waterbeach.

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Latest update

In June 2020, the proposal to build the waste incineration plant was rejected by the government.

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