ANDERSON SERANGOON JUNIOR COLLEGE

JC1 H1 Geography Mid-Year Common Test (2023)

H1 GEOGRAPHY **8834/ 01**

28 June 2023

INSERT **1 hr 30 mins**

READ THESE INSTRUCTIONS FIRST

The Insert contains all the Resources referred to in the questions.

This question paper consists of 7 printed pages.

[Turn Over]

Resource 1 for Question 1

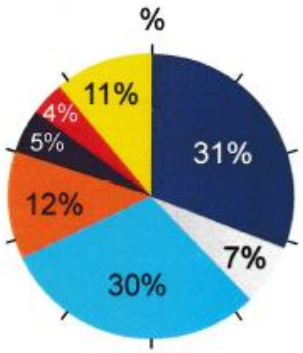
Percentage of the total population that lives in urban areas for selected world regions from 1990 to 2050 (projected)

world region	1990	2018	2050 (projected)
Africa	32	43	59
Asia	32	50	66
Europe	70	74	84
Latin America and the Caribbean	71	81	88
North America	75	82	89

Resource 2 for Question 1

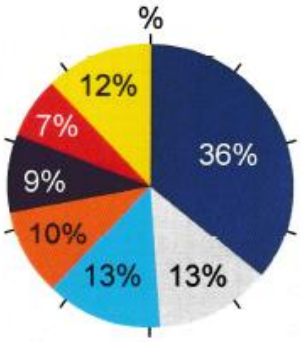
Ecological footprints of Athens, Greece and Cairo, Egypt

Athens



4.84 gha ecological footprint per person

Cairo



2.85 gha ecological footprint per person

Key

ecological footprint per person

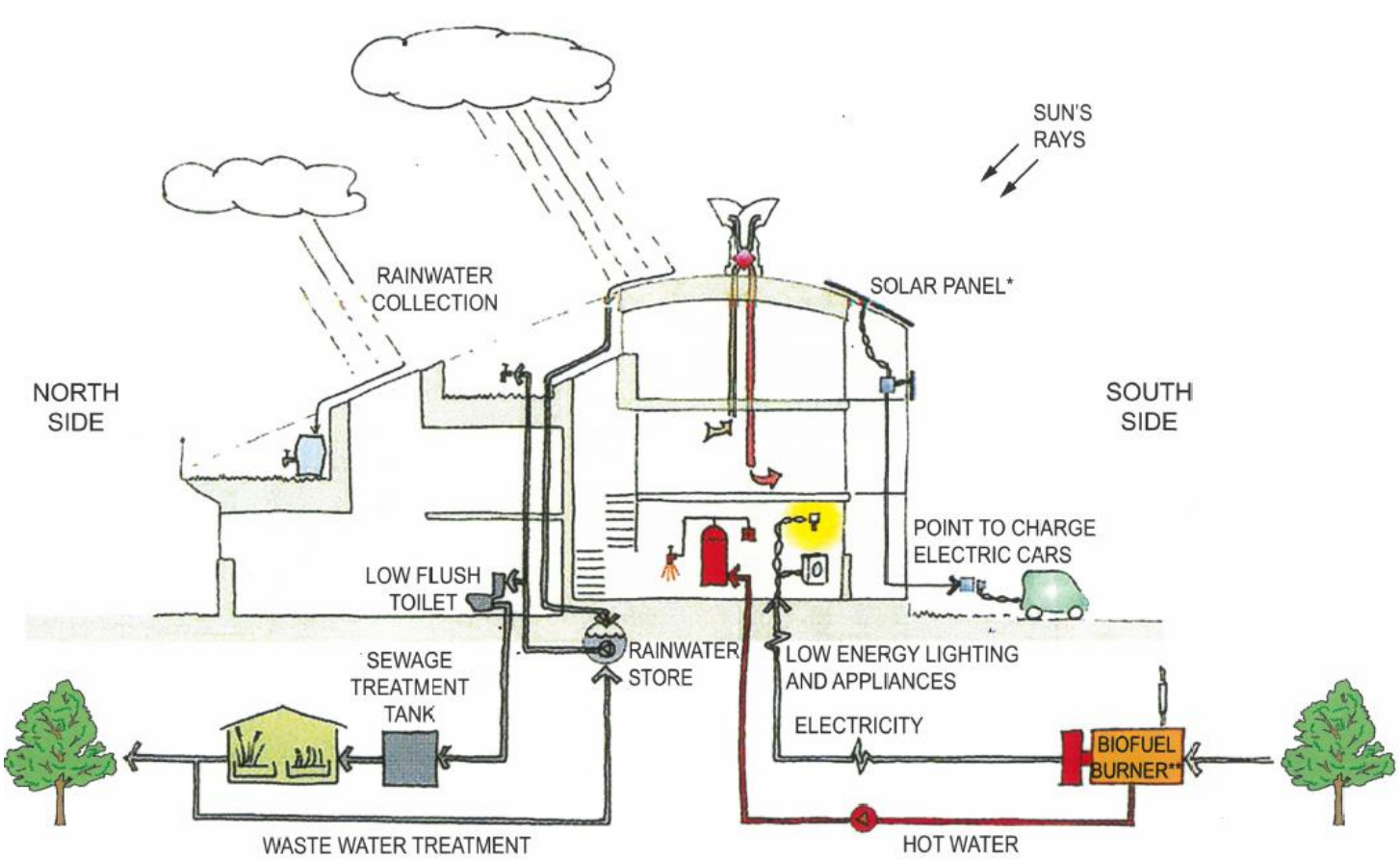
- food
- housing
- personal transportation
- goods
- services
- government
- infrastructure investment (houses, bridges, roads, factories)

gha global hectares

Resource 3 for Question 1

Cross section of a home in BedZED to show water and power systems

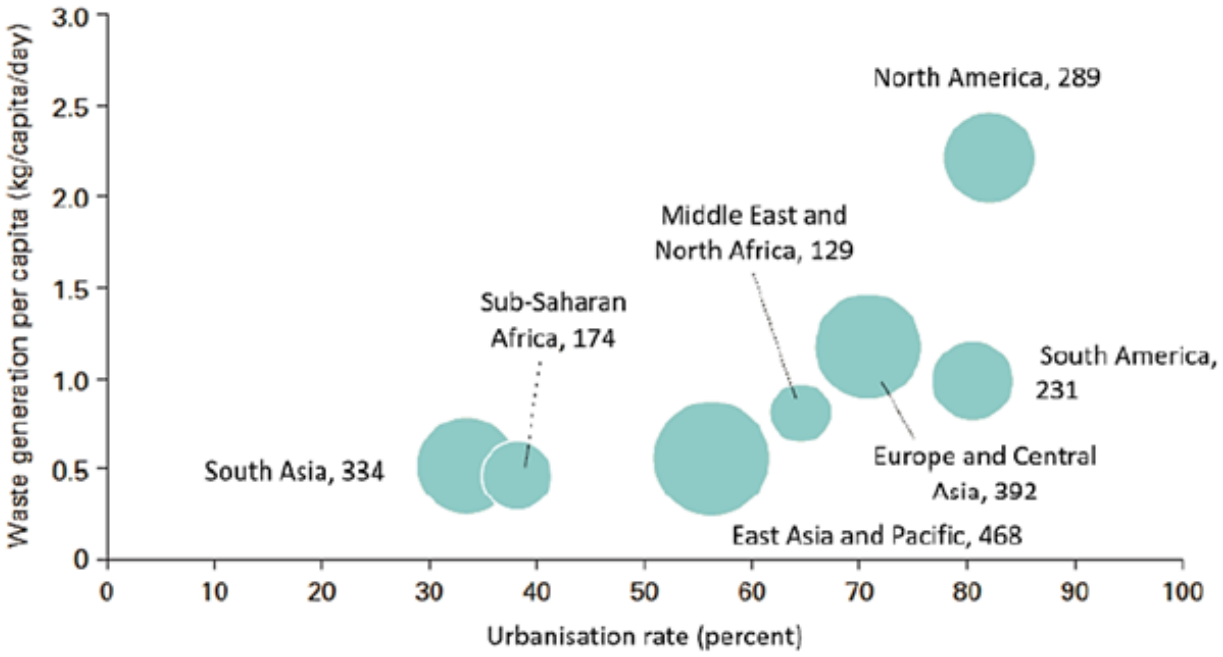
Beddington Zero Energy Development (BedZED) is the UK's largest sustainable urban development and was designed to be carbon neutral. It comprises 82 homes and 20 offices and workspaces built on reclaimed land. BedZED was completed in 2002.

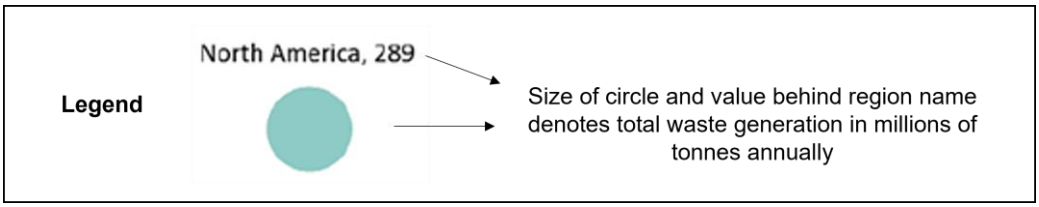


* Solar panels convert the Sun's rays into electricity.
** Biofuel burner uses dead branches and leaves to create electricity and heat water.

Resource 4 for Question 2

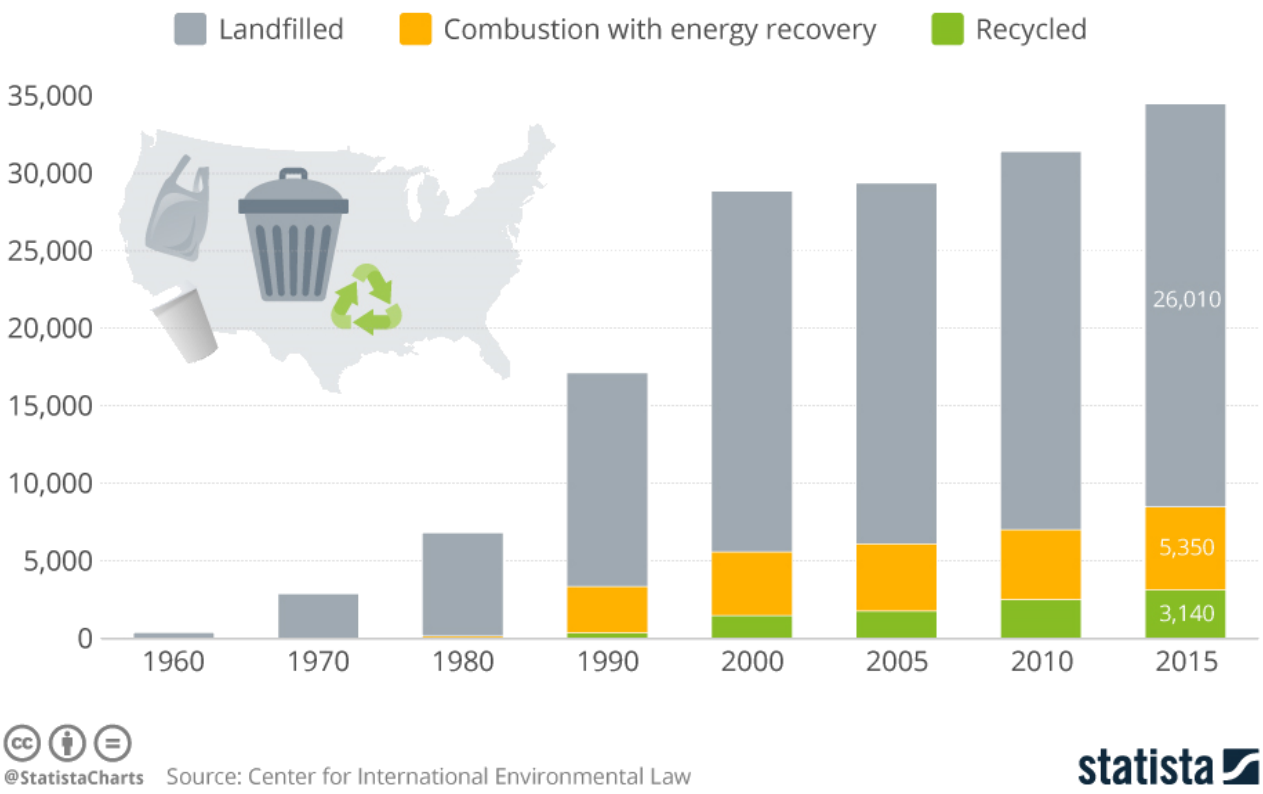
Waste generation per capita and urbanisation rate, by regions





Resource 5 for Question 2

Plastic waste management in the USA from 1960 to 2015 (thousand tonnes)



Resource 6 for Question 2

Article on recycling in Canada

Canadians dispose of about 3.3 million tonnes of plastic each year, according to a 2019 study commissioned by Environment and Climate Change Canada (ECCC), almost half of which is packaging. Well over three-quarters currently goes to landfills, a small proportion is incinerated and about one per cent ends up directly in the environment. Only nine per cent — or 305,000 tonnes — is recycled.

That's no surprise. Low oil prices make it difficult for plastic recyclers, who must invest in expensive sorting and processing facilities, to compete against already established petrochemical manufacturers. It's cheaper to make plastic from so-called "virgin oil" and put the waste in landfills than it is to recycle old plastics into new products.

Recycled plastic production is also hindered by available technology. For recycling to be effective, the stream of plastics entering the recycling facility needs to be clean and well sorted — a requirement that is difficult to meet. There is also a large variety of plastics, and these are also incorporated into different parts of the same consumer product, which makes sorting difficult or impossible.

In addition, the majority of plastic waste in Canada comes from businesses, institutions and industry, yet most regional waste management schemes focus on collecting and recycling plastic waste from homes.

Source: https://www.nationalobserver.com/2021/03/09/canada-drowning-plastic-waste-recycling-wont-save-us