Cambridge IGCSE[™]

GLOBAL PERSPECTIVES

0457/11

Paper 1 Written Examination

October/November 2022

INSERT 1 hour 15 minutes

INFORMATION

- This insert contains all the sources referred to in the questions.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



Source 1

More electricity is being used throughout the world to power homes, schools, businesses and factories. A growing world population and the development of new technologies mean the demand for electricity will continue to increase.

However, it is estimated that nearly 1.3 billion people in the world do not have access to electricity. Nearly 3 billion people cook and heat their homes using open fires and simple stoves burning wood, animal dung, crop waste and coal. If more people globally are given access to electricity, its use will further increase.

Source 2

Reasons for increasing the production of electricity		Problems of increasing the production of electricity
World population is rising		Environmental damage
Use of electrical products is increasing		Increased emission from fossil fuels
Electricity consumption is predicted to rise		Cost to build more power stations
Cleaner sources of electricity are now available		Prices may need to increase to pay for producing more electricity
Not all people currently have access to electricity	Maria (MA)	Producing electricity uses lots of water
As countries develop, they will require more electricity	A coal-fired power station	Local residents may not want new power stations near their homes

Source 3: We can generate electricity without harming the environment

I have a degree in engineering and I have been studying the production of electricity for a number of years. I am now a politician and I would like to use my expertise to improve your local area.

Have you seen all the waste that is near here in the landfills and the fields? It is not safe for our families. Do you know that in our country, one person produces about 1.5 kilograms of household waste per day? Some of it can be recycled, but not all of it. This waste could be used to generate electricity and this would improve the local environment.

We should build a power station that burns some of this waste and generates the electricity that we all need. I am sure you will not object to losing a few fields to make space for the building and road network. Communities in nearly 40 countries have decided to create energy like this, so this must be a good idea!

We can also use other renewable sources of electricity like wind and solar power. But burning waste will improve the local environment and generate electricity at the same time.

Extract from a speech by a local politician in Europe

Source 4: A debate about electricity usage

Leo, a college student

People need to use electricity because we rely on it for so many things. In the daytime families use different appliances like washing machines, televisions and computers. In the evenings the use of lighting increases. We need to light our homes and streets to stay safe and reduce crime.

There are some parts of the world that do not currently have electricity. If we want to reduce inequality, we need to give these people access to electricity. This means even more electricity will be required in the future.

Some people say this is bad for the environment and it is not sustainable to use so much electricity. However, there are renewable sources of electricity and these do not harm the environment. If we develop these further, everyone will be able to use as much electricity as they need.

New technologies will also increase demand for electricity. If we want to support technological progress and spread prosperity across the world then we need to find ways to generate more clean electricity.

Sophia, a mother of four children

The problem with your ideas, Leo, is that they are too expensive for people and the environment. Who will pay to develop these new technologies? Governments will have to raise taxes and people will have to pay more for their electricity. I do not think you understand the problems families have with their energy bills! How can we afford to pay more taxes and higher energy bills when they are so expensive already?

Generating electricity will always have an impact on the environment; it is impossible to have completely clean energy. Producing wind turbines and solar panels uses a lot of energy and harms the environment.

I think that the best answer is to have a simpler lifestyle. We all rely too much on electricity and we should think about changes we can make so that we use less. Do we really need all of these new devices that use electricity? Children should spend more time reading books and less time looking at devices.

4

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