Cambridge Assessment International Education

# Cambridge IGCSE™

**GLOBAL PERSPECTIVES** **0457/11**

Paper 1 Written Examination **May/June 2023**

INSERT **1 hour 15 minutes**

*4946454802-I*

**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.



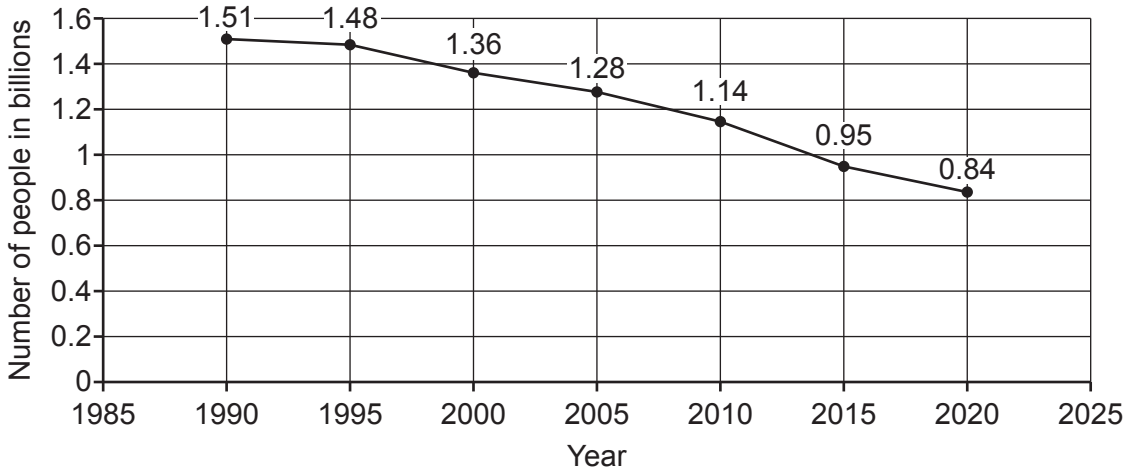
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**[Turn over**

**Source 1**

In the past 30 years, there has been progress in supplying affordable, reliable and clean energy to the world's population of about eight billion people.

**Number of people without access to electricity, worldwide**




**Source 2**

There are two main energy problems. The first problem is the release of greenhouse gases that cause climate change when fossil fuels are used to produce energy. The second problem is energy poverty. This happens when people do not have electricity and clean cooking fuels. Almost a billion people do not have access to modern energy technology.

| | |
|---|---|
| **Some consequences of energy poverty** | Cooking with fire causes indoor air pollution and disease. |
| | Living is harder without cold food storage, washing machines and light at night. |
| | Heating with firewood causes deforestation and environmental damage. |
| | Communication and entertainment with computers and television is impossible. |
| | Teaching and learning activities are limited without electricity. |
| | Economic development is much slower. |

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**Source 3: The world's energy problems must be solved by the rich industrialised countries**

Cheap, reliable and sustainable energy is needed by all nations to solve the world's energy problems. But who should pay for this?

The rich industrialised nations have created the problem. History shows us that industrialisation in the past depended upon dirty fossil fuels for power. Rich industrialised nations emit the most greenhouse gases. In 2020, a study by Oxfam showed that the richest 10 per cent of the global population were responsible for about 52 per cent of global emissions. If they caused the problem, it is right for them to solve the problem.

Richer, industrialised nations have renewable technology using the sun and wind to produce cheaper, sustainable energy. This technology should be shared with other nations.

Developing nations do not yet have enough money and expertise to end energy poverty. We must help them – we are all suffering from climate change and should work together to provide clean energy for all.

*Extract from an internet blog on energy written in the United States in 2021*

**Source 4**

**Hua**

Climate change is happening quickly. Energy poverty spoils lives. Access to modern electrical energy is needed to create more jobs and better schooling. The issue is so large that governments must act now.

Building an electrical supply grid across the country is very expensive and needs major planning. Only governments can coordinate this type of vast project.

More research into storing renewable solar and wind energy is needed; batteries are still very heavy and expensive. Using heat energy from the earth and hydrogen as a fuel for transport are other possible solutions that need more research. Only governments can afford to fund expensive energy research for our universities and businesses.

A recent newspaper report said that government investment in renewable energy is vital to reduce energy poverty everywhere.

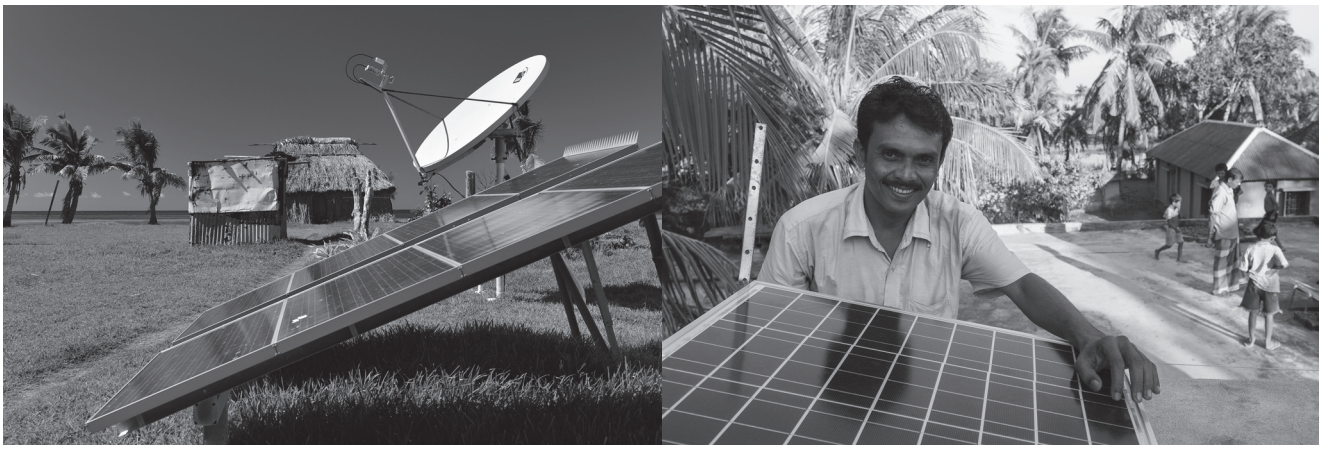
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**[Turn over**

**Jin**

Are governments really the solution? In my experience, they spend too long arguing about what to do!

The World Bank suggests that energy poverty is best solved at the local level. It is quicker and easier to install small-scale technologies. These also take up less land and are often cheaper. For example, solar panels can be used by several families to create a microgrid. Look at these pictures of microgrids:



According to the International Energy Agency, microgrids can deliver electricity to people in remote rural areas. By powering fridges, water pumps and other machinery, microgrids save time for families on household tasks, help farmers increase crop yield and provide light in classrooms. A charity in India recently installed microgrids to power more than 150 villages serving 230,000 people.

Energy efficient stoves and low energy lightbulbs can also be introduced. People need to be educated by local teachers about how to use energy.

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