

Exercise walk-through

Global Energy Consumption ■ 6.2

eXercise

You must be able to

- describe patterns of energy use across **developed** and **developing** countries
- explain why consumption is rising
- link consumption to development

Method — Global patterns

Developed countries use far more energy **per person** than developing ones. As **developing** countries industrialize and grow, their total energy use rises rapidly.

Method — Fossil fuels dominate

Most of the world's energy still comes from **fossil fuels** (oil, coal, natural gas), though renewables are growing.

Method — Why consumption rises

Rising **population**, **industrialization**, and **living standards** all increase energy demand — more machines, transport, and appliances.

Method — A worked comparison

A person in a wealthy industrialized country typically uses many times more energy than a person in a low-income country, mainly for transport, heating/cooling, and manufactured goods.

Practice 2.1 ■ 1 mark

Which use more energy per person: developed or developing countries?

Solution 2.1

Method: Global patterns

Worked steps

Developed countries **B1**.

Practice 2.2 ■ 1 mark

What is the world's dominant energy source?

Solution 2.2

Method: Fossil fuels dominate

Worked steps

Fossil fuels **B1**.

Practice 2.3 ■ 1 mark

State one reason global energy use is rising.

Solution 2.3

Worked steps

Any one: population growth, industrialization, rising living standards **B1**.

Exam-style 3.1 ■ 1 mark

Global energy consumption is rising mainly due to

- A** falling population
- B** industrialization and rising living standards
- C** less transport
- D** fewer appliances

Solution 3.1

Method: Why consumption rises

- A falling population
- B industrialization and rising living standards** 
- C less transport
- D fewer appliances

Worked steps

B — industrialization and rising living standards.

Exam-style 3.2 ■ 1 mark

A developing country begins to industrialize rapidly.

- (a) Predict what happens to its energy consumption.
- (b) Explain why.

Solution 3.2

Method: Global patterns

Worked steps

(a) It rises (increases) **B1**. (b) Industrialization adds factories, transport, and appliances, and rising incomes increase demand, so energy use grows **M1** **A1**.

Exam-style 3.3 ■ 2 marks

Explain why per-person energy use is higher in developed countries.

Solution 3.3

Method: Global patterns

Worked steps

Developed countries have more industry, cars, heating/cooling, and manufactured goods per person, all of which require large amounts of energy **M1** **A1**.