

Oxford Revise | Geography | Answers

Chapter 44 Changing attitudes to energy

All exemplar answers given are worth full marks.

1. a)

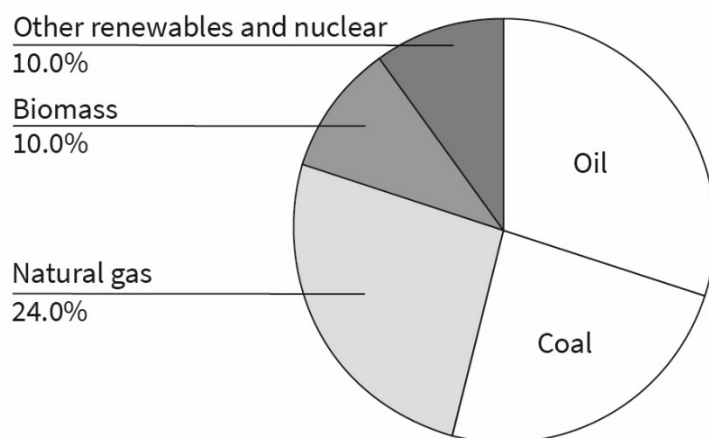
- i) There are several reasons why energy consumption will continue to rise. By 2050, global population is expected to reach 9.3 billion. More people increase the demand for energy. As countries develop, urbanise, and industrialise, their energy use increases. More energy is needed to power increasing numbers of computers, EVs, air conditioners, and other electrical equipment.
- ii) Emerging economies are experiencing some of the highest rates of population growth and industrialisation. When people have more money to spend, they buy mobile phones, games consoles, and other digital devices.
- iii) Future energy needs are difficult to predict for several reasons. It is not known whether global population growth will continue at its current rate. The rate at which the economies of developing countries grow will determine how much energy they will need. There is a need for everybody to become more energy efficient. The rate at which people insulate their homes and take up other ways of conserving energy will also impact on future energy demand.

2. a)

- i) Rising wealth increases demand for a wide range of food products on supermarket shelves. People buy goods in bulk and in advance of when they need them, meaning that food is often not all used and therefore goes to waste.
- ii) Food waste may end up in landfill. This is unsightly, smelly, and needs careful management because food waste rots and then releases methane, a powerful greenhouse gas which contributes to climate change. A large amount of food is imported from abroad which results in unnecessary food miles. If food is wasted, then the fuel consumed when flying it to the UK has also been wasted. The fuel used by aircraft create carbon emissions which contribute to climate change.

3. a)

i) The pie chart should be completed as below:



ii) The global use of energy is dominated by fossil fuels. The 80% is roughly evenly split between oil, natural gas, and coal. Biomass only accounts for 10% of energy usage. Other renewables, including nuclear make up the remaining 10%.

iii) Rock type and structure is important for formation of fossil fuels. Climate affects a range of renewables, such as solar and wind energy, because there needs to be sufficient sunshine and a constant supply of wind for electricity to be generated. Political instability in regions like the Middle East means some countries do not wish to rely totally on energy generated in this area in case war or another issue breaks out. Developed countries are anxious about some nations, such as North Korea and Iran, developing nuclear power, as they fear it will be used for non-peaceful means. The UK has the policy of encouraging the use of renewable power to reduce reliance on fossil fuel generation which contributes to climate change.