

1 Electricity can be generated using fossil fuels as an energy source. There is concern over fossil fuels and the environmental problems associated with their use.

Using renewable energy sources can help to reduce the problems caused by using fossil fuels, but there are some disadvantages to using renewable energy sources.

1 (a) (i) What is a renewable energy source?

[1 mark]

An energy source that can be replaced or does not run out. [1]

Do not say 'can be reused'

1 (a) (ii) One source of renewable energy is wind. Name two other renewable energy sources that can be used to generate electricity.

[2 marks]

Any two from:

Hydroelectric, water waves, tidal, geothermal, solar, (waste) biomass.

1 (a) (iii) Energy in the wind is transferred to electrical energy by wind turbines. Wind farms are areas that contain several wind turbines.

Give two advantages and two disadvantages to building a wind farm to generate electricity.

[4 marks]

Advantage 1 Uses a renewable energy source.

Advantage 2 Energy source is free.

Disadvantages

Any two from:

Unreliable or there is not always enough wind.

Noise pollution.

An 'eyesore' or visual pollution.

First three are the common responses, but there are others, e.g. Obstruction to shipping if offshore, or even sunlight flicker (the flickering effect if you're in the shadow of one!)

(Total 7 marks)

End