



Solution Booklet

The Centre aims to reduce its carbon dioxide emissions by 20% below its 2001 levels by 2010. After considering the numerous routes to achieving this target, the Centre decided that the most suitable would be to improve the energy efficiency of their building stock. Incidentally, in order to achieve similar outcomes, the government is aiming to have 10,000 MW installed Combined Heat and Power (CHP) capacity by 2010.

Whilst many technologies were considered, a CHP unit is ideal for increasing the energy efficiency of the buildings operated by the Centre, since it will reduce the buildings' electricity and gas consumption. The CHP unit selected for the Centre would serve the heating demand for both the domestic hot water system and the swimming pool, but it would not be adequate to also serve the space-heating requirements.

Q1 The only way the Centre can reach their carbon emissions target is by improving the energy efficiency of their buildings.

True **False** Cannot say

The passage says there are "numerous routes to achieving this target", of which improving the energy efficiency of buildings is only one. So improving the energy efficiency is one way, but not the only way.

Q2 The Centre is improving energy efficiency because the government have imposed legal obligations to do so.

True False **Cannot say**

The passage talks about a government aim to reach a certain MW installed capacity of CHP but no mention of legal obligations are made in the text. Therefore we cannot say whether it is true or false based purely on the information contained within the passage.

Q3 The Combined Heat and Power unit selected for the Centre will not be able to provide all the heating requirements for the Centre.

True False Cannot say

We are told the CHP unit "would serve the heating demand for...but would not be suited to space heating requirements" which means it would not be able to provide all the heating requirements for the Centre.

Enticing people to choose a bus over their car is difficult. Governments have tried by improving the comfort and frequency of public transport. However, this has little effect because people value their cars too highly. Public opposition to governmental action on car use has already been demonstrated through the petrol blockade.

The most likely solutions are ones that retain the most driver-convenience, whilst retaining low cost. A popular suggestion is to improve public transport so personal cars are needed less. This can be gradually implemented alongside existing traffic and uses existing road systems.

Q4 Governments have in the past made public transport more comfortable and increased its frequency.

True False Cannot say

This is implicit from the statement that "Governments have tried [enticing people to choose a bus over their car] by improving the comfort...of public transport". Whether they succeeded in getting more people to use public transport is another matter.

Q5 In the past, governmental actions have resulted in public demonstrations.

True False Cannot say

The passage tells us this is true from the statement "governmental action on car use has already been demonstrated through the petrol blockade". The petrol blockade can reasonably be considered as a demonstration.

Q6 If the government were successful in enticing more people to use public transport instead of their cars, there would be less traffic on the road.

True False Cannot say

The passage does not say whether or not traffic would increase if more people swapped their cars for public transport. This cannot be deduced from the passage either, since it does not say whether more or less car sharing would take place, thus increasing or reducing the number of vehicles on the road.

- End of free verbal reasoning test 1 -