

Energy in GCSE Geography Specifications Overview

Specification	Section	Specific details
AQA 'A'	Globalisation The increasing global demand for energy through sustainable and non – sustainable developments	The impact of world population growth, increased wealth and technological advances on the global demand for energy. The social, economic and environmental impact of increased energy use.
	Sustainable development must ensure that the environment is protected and that there are sufficient resources for future generations.	Ways of achieving sustainable development through the use of renewable energy. A case study of one type of renewable energy. The importance of international directives on pollution control and carbon reducing initiatives. Ways of reducing the costs of globalisation from local (recycling/landfill) to global (carbon credits)
	Opportunities for use of GIS	Impact of extraction of energy resources, oilfields, irrigation, salt pans. Worldmapper.org to track import/exports, satellite imagery showing night time use of energy.
AQA 'B'	Energy in the 21st Century How are energy use and development linked?	The demand for energy is linked to levels of development. Increasing demand raises questions about global energy security
	What environmental issues are associated with using natural resources as sources of energy?	The exploitation and use of fossil fuels can create environmental problems. Nuclear power may play an increasing role in energy supply. Renewable energy sources have costs and benefits. The use of fuelwood in developing countries is a threat to people and the environment.
	How can future energy demand be met increasingly sustainably?	Using energy more efficiently can play a part in reducing demand. Developments in renewable energy technology will increase the opportunity to move towards a more sustainable energy future. Use of technology and new building techniques can reduce residential energy use. More energy-efficient transport systems will become an increasing priority.
Edexcel 'A'	A Wasteful World Sources and uses of energy The advantages and disadvantages of renewable and non-renewable fuels.	Types of renewable and non-renewable fuels, the advantages and disadvantages of their production and use.
	The distributions of energy deficit and energy surplus on a global scale	Maps of the world showing nations which have energy surplus/deficit.
	Management of energy usage and waste How energy is being wasted.	How energy is being wasted.
	Carbon footprints for countries at different levels of development	The calculation of carbon footprints for countries at different levels of development.

	Possible solutions to energy wastage in the UK on a domestic, local and national scale.	The possible solutions to energy wastage in the home or in schools, including energy efficiency in the use of building materials construction and technology. The solutions/policies which are being considered by local councils and industries, e.g. wind turbines for schools. Energy efficient housing estate at Milton Keynes. The Eastcroft District heating scheme in Nottingham.
Edexcel 'B'	Changing Cities There are tensions between cities as generators of wealth and as eco-friendly organisms.	Identify how cities develop by consuming energy and resources from other environments, and export their waste back to those and other locations. Assess the impact of urban activities, e.g. landfill, energy consumption on surrounding regions
	Cities have huge potential for reducing their eco-footprints.	Assess how one city is reducing its eco-footprint by reducing energy consumption and waste generation. Analyse the potential for more sustainable transport alternatives in their own local area.
OCR 'A'	No relevant energy content	
OCR 'B'	Energy a theme in Geographical Investigation only	
WJEC 'A'	Climate Change How can technology be used and people's lifestyles changed to reduce the impact of climate change?	Energy saving in the home, efficient public transport, solar furnaces, Kyoto, carbon trading, restricted aviation.
	What changes are likely to take place in energy supply and demand in Wales? How does Wales supply its current energy needs?	Mostly using fossil fuels. Imported coal and gas. Electricity from National grid mainly from coal, oil and gas fired power stations and some nuclear. Limited amounts of energy from renewable
	What future changes may take place in energy sources and in demand?	Increase in wind power generation; possibility of Severn barrage tidal scheme; renewed interest in nuclear expansion; bio fuel Port Talbot, continued use of coal, oil initiatives, technological changes.
	What conflicts of opinion are these changes to supply likely to introduce?	Debate re. effects of wind farms on wild life and scenic beauty, Severn barrage on estuarine environment; nuclear dangers and waste disposal, etc.
WJEC 'B'	No relevant energy content	