



Topic 9: Consuming Energy Resources PLC

Element of the course			
How energy resources can be classified as non-renewable (finite stocks of fossil fuel coal, oil and gas), renewable (flows of solar, wind, HEP) and recyclable (nuclear, biofuels).			
How mining and drilling can have environmental impacts (landscape scarring, oil spills, carbon emissions, removal of forests) and the landscape impacts of renewable energy (HEP flooding, land use for wind turbines and solar panels).			
How access to energy resources is affected by access to technology and physical resources (geology, accessibility, climate and landscape influences on renewable potential).			
The global pattern of energy use per capita and the causes of variations (levels of economic development, reliance of traditional fuel sources, demand from different economic sectors).			
How oil reserves and production are unevenly distributed and why oil consumption is growing (rising per capita GDP, rapid industrialisation in emerging economies).			
How oil supply and oil prices are affected by changing international relations (conflicts, diplomatic relations) and economic factors (periods of recession versus boom, over or under supply).			
Economic benefits and costs of developing new conventional oil and gas sources in ecologically-sensitive and isolated areas.			
Environmental costs (negative impacts on water quality and ecosystems) of developing new unconventional oil and gas sources (tar sands, shale gas) in ecologically-sensitive and isolated areas.			
The role of energy efficiency and energy conservation (in transport and the home) in reducing demand, helping finite energy supplies last longer and reducing carbon emissions.			
Costs and benefits of alternatives to fossil fuels (biofuels, wind, solar and HEP) and future technologies (hydrogen) aimed at reducing carbon footprints, improving energy security and diversifying the energy mix.			
How different groups (consumers, TNCs, governments, climate scientists and environmental groups) have contrasting views about energy futures (business as usual versus sustainable).			
How, in some developed countries, rising affluence, environmental concerns and education are changing attitudes to unsustainable energy consumption and reducing carbon footprints.			

SELF ASSESSMENT

TEACHER ASSESSMENT

PM (Progress Made?)

PF (Progress Forward?)

Your strengths in this activity are...

To improve your grade you should...