Summary of Chapter 2

- **Fossil fuels are a finite resource. They are becoming harder to extract and, eventually, will be in shorter supply and more expensive.**
- **Conventional oil is at, or approaching, peak production rates.**
- **The UK is becoming increasingly dependent on imported energy as North Sea production of oil and gas declines. This has security implications.**
- **It is time to stop extracting and burning fossil fuels most of which, to avoid 2°C, let alone 1.5°C, warming, should stay in the ground.**
- **Because, in the USA, roughly ten per cent of shale gas is lost during its production and onward transmission shale gas is potentially even more climate damaging than coal and therefore cannot be a solution to the UK's energy needs.**
- **Coal makes a large contribution to CO_2 emissions because it is the dirtiest of all fossil fuels (possibly with the exception of shale gas).**
- **The capture and storage underground of CO_2 emitted by fossil-fuel burning power stations offers one way to mitigate climate change but the technology remains immature mainly from a lack of investment.**
- **Nuclear power is at a low ebb and is unlikely to be able to respond to the UK's energy needs in the near future. Existing plant is approaching the end of its life. Over the period of time in which mankind has to take firm action to mitigate climate change, new nuclear power in the UK is unlikely to be able to provide a reliable source of electricity.**
- **Given the problems with fossil fuels, carbon capture and storage, and nuclear power, renewable energy appears to be today's answer to the UK's energy problems. This is an approach to which, in the right circumstances, better-off individual homeowners can contribute.**
- **Numerous quantitative studies suggest scenarios whereby the UK and other countries can achieve net zero carbon by 2050.**