Benefits of renewables

- We will never run out of plants, unlike petrochemicals which take millions of years to form
- Allow us to be less reliant on imported oil
- Can reduce greenhouse gas emissions (GHGs)
- Can take less energy to manufacture (which means even less GHGs emitted)
- Provide rural communities with new business opportunities
- Provide lots of opportunities for innovative businesses in the UK
- Can create jobs in new innovative technology sectors
- Perennial crops are better for some kinds of wildlife eg willow supports a wide range of insects
- Can be biodegradable so when they are finished with they can be converted to fertilizer and used to grow new plants – a virtuous circle!
- Can have unique properties that petrochemicals can't, such as less toxic paint, soft and strong fibres for building cars, really warm insulation
- Can be disposed of through home composting, anaerobic digestion to produce biogas, or by burning in combined heat and power units, rather than landfill

Drawbacks of renewables

- Currently they cost more than petrochemical products, though prices are expected to fall with economy of scale and as petrochemicals become more scarce and expensive
- There is only so much land – we will need it to grow food and animal feed too
- The UK isn't big enough to grow all the plants we will need – imports will continue
- Renewable materials can have different properties to the petrochemicals we are used to
- As an energy source, biomass is less dense than fossil fuels. This means less energy is produced per kilo of material
- Because they are produced on a small scale it can be uneconomical to recycle some renewable materials
- Perennial crops are less good for some kinds of wildlife eg birds that forage in winter stubble fields
- If lots of fertilisers are used to grow plants, renewables may not save as many greenhouse gases as we might hope