

Finite and Renewable

What do the words mean??

Finite = Will run out eventually
Renewable = We can replace them as we use them

Sustainable = meets the needs of the current generation without compromising the ability of future generations to meet their needs.



What do we use the earth's resources for?

- Warmth
- Shelter
- Food
- Transport

We can use them as natural resources or process them.

'Natural resources' + agriculture provides

- Food
- Timber
- Clothes

Finite resources are processed to get us

- Energy
- materials



e.g. Coal, oil and gas are used for energy.
 e.g. metal ores are mined to get metals.

e.g. Cotton is natural and we grow cotton plants. OR we can use synthetic materials e.g. nylon



Treating water

C14 The Earth's Resources

LCA and RRR

Potable water must have low levels of SALTS and MICROBES (it isn't PURE water)

Rainwater in lakes, rivers and reservoirs

Filter

Why? To remove insoluble solids

Sterilise – chlorine, ozone, or UV light

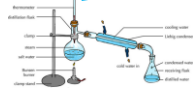


Why? To kill microbes

Industrial and agricultural waste water – remove organic matter and harmful chemicals

Salt water

Desalination



Distillation

Reverse osmosis



☹ Both use a lot of energy

Sewage

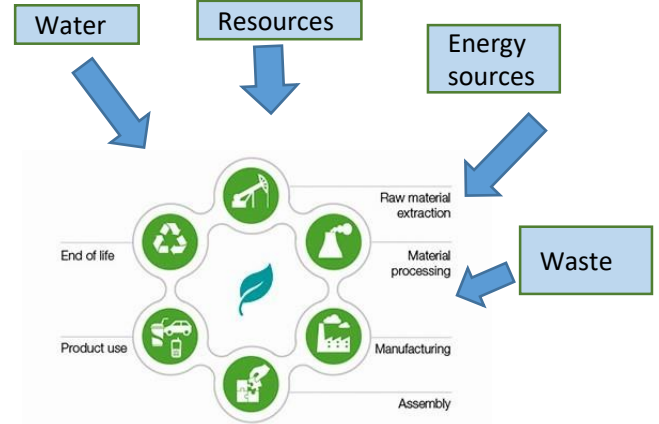
Screening and grit removal

Sedimentation

Anaerobic digestion of sludge

Aerobic treatment of effluent

Life Cycle Assessments



Reducing use of resources

Why bother? Reduce...use of limited resources



Why bother? Reduce...use of energy resources



Why bother? Reduce...waste and environmental impacts



mining



landfill