

Renewable Energy and Community Debates

Types of renewable energy starter activity

Teacher Answer Sheet

Type of renewable energy	Positives	Negatives
Solar	Potentially infinite energy supply. Single dwellings can have their own electricity supply.	Manufacture and implementation of solar panels can be costly.
Wind	Can be found singularly, but several are usually found together on wind farms. Potentially infinite energy supply.	Manufacture and implementation of wind farms can be costly. Some local people object to on-shore wind farms, arguing that it spoils the countryside.
Tidal	Ideal for an island such as the UK. Potential to generate a lot of energy. Tidal barrage can double as a bridge, and help prevent flooding.	Construction of barrage is very costly. Only a few estuaries are suitable. Opposed by some environmental groups as having a negative impact on wildlife. May reduce tidal flow and impede flow of sewage out to sea.
Wave	Ideal for an island country. More likely to be small local operations, rather than done on a national scale.	Construction can be costly. May be opposed by local communities or environmental groups.
Geothermal	Potentially infinite energy supply. Used successfully in some countries, such as New Zealand and Iceland.	Can be expensive to set up and only works in areas of volcanic activity. Geothermal and volcanic activity might calm down, leaving power stations redundant. Dangerous elements found underground must be disposed of carefully.

Citizenship

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Hydroelectric Power (HEP)	It is a cheap and readily available source of energy.	Dams may be opposed by local communities or environmental groups.
Biomass	If replaced, biomass can be a long-term, sustainable energy source.	When burned, it gives off atmospheric pollutants, including greenhouse gases. Biomass is only a renewable resource if crops are replanted.
Wood	A cheap and readily available source of energy. If the trees are replaced, wood burning can be a long-term, sustainable energy source.	When burned it gives off atmospheric pollutants, including greenhouse gases. If trees are not replanted then wood is a non-renewable resource.

Taken from:

www.bbc.co.uk/schools/gcsebitesize/geography/energy_resources/energy_rev2.shtml

