

Advantages and Disadvantages of Renewable Energy

One major advantage with the use of renewable energy is that as it is renewable it is therefore sustainable and so will never run out. Renewable energy facilities generally require less maintenance than traditional generators. Their fuel being derived from natural and available resources reduces the costs of operation.

Even more importantly, renewable energy produces little or no waste products such as carbon dioxide or other chemical pollutants, so has minimal impact on the environment. It is easy to recognise the environmental advantages of utilising the alternative and renewable forms of energy but we must also be aware of the disadvantages.

Renewable energy projects can also bring economic benefits to many regional areas, as most projects are located away from large urban centres and suburbs of the capital cities. These economic benefits may be from the increased use of local services as well as tourism.

One disadvantage with renewable energy is that it is difficult to generate the quantities of electricity that are as large as those produced by traditional fossil fuel generators. This may mean that we need to reduce the amount of energy we use or simply build more energy facilities. It also indicates that the best solution to our energy problems may be to have a balance of many different power sources.

Another disadvantage of renewable energy sources is the reliability of supply. Renewable energy often relies on the weather for its source of power. Hydro generators need rain to fill dams to supply flowing water. Wind turbines need wind to turn the blades, and solar collectors need clear skies and sunshine to collect heat and make electricity. When these resources are unavailable so is the capacity to make energy from them. This can be unpredictable and inconsistent. The current cost of renewable energy technology is also far in excess of traditional fossil fuel generation. This is because it is a new technology and as such has extremely large capital cost.

Chris Burton, Heriot-Watt University, <http://hw.ac.uk>, Edinburgh,
Lothian, Scotland, United Kingdom