

We have many natural resources that we can tap into for our energy needs; Light/solar energy (**available for millions of years**). Plants have successfully harnessed this source of energy and produce oxygen and food as well as absorbing some of the carbon dioxide we produce. They provide for all of our needs but we keep clearing plants out of the way to provide space for our concrete jungles. Why can't we copy their method of capturing light/solar energy? We have learnt from nature before.

We are an island. Why can't we use **wind, wave and tidal energy** for our needs? These methods cause little pollution after the structures used to capture the type of energy are made and, as we are aware, there is a huge cost implication in decommissioning nuclear power stations. Instead we continue to pollute by burning **fossil fuels** and many of the richest countries of the world are hell-bent on following a program of building **nuclear power stations** even though we cannot make the waste products safe.

Additional concerns:

A program of **fracking** seems to be going ahead despite public concern. The search for GDF sites alongside applications to allow fracking to go ahead makes me think that we don't have a very organised plan for the UK's future energy needs. **Terrorism** is another concern, although I was assured that storing nuclear waste deep underground would be safer than the above ground storage that we have at the moment. **Human error** is always an issue, especially as the plan is to seal these GDF's, so monitoring would be difficult. **Geological changes** do happen even though they are very slow but we are expecting these sites to remain safe for hundreds of thousands of years. **Environmental changes** will take place over that long time period. We know there are constant changes to weather patterns in the UK and we have had several ice ages which have seen ice cut through the rocks of the UK like a knife through butter, carving out areas such as the Pennines. Will our GDF sites be secure in all these situations? **Excavation** after just a few hundred years these sites may be excavated without the excavators knowing that they are unearthing something so dangerous to life on the planet.

I understand that we already have nuclear waste which we have to store somewhere. However, there has to be checks and balances, constantly made, by highly trained individuals who understand how dangerous these wastes are. We should learn from the past. When inventions have left the hands of the scientists; governments, the military and financiers have always gone through cost cutting measures and information gets accidentally (or conveniently) lost or distorted on the way to the implementation of the invention. Non-scientists often do not realise the full consequences of the changes they make.

Finally, I would like to sound a note of caution. We only have one planet which can support life as we know it, there really is **nowhere else to go** if we mess up this one (which we are already doing in lots of ways). We must think about more than just jobs and profit margins and sweeping our waste under the carpet, out of sight.

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