

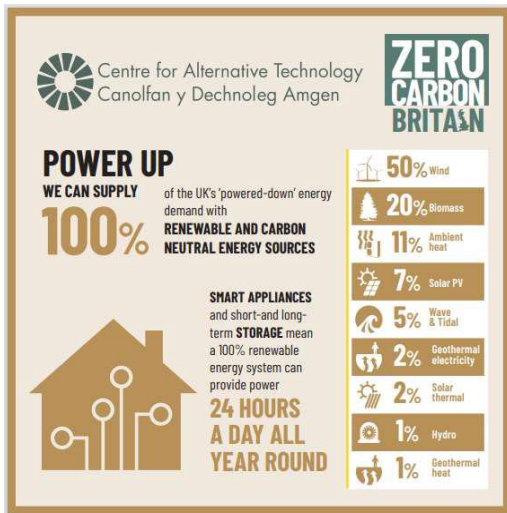
What are the problems?

Burning fossil fuels – coal, oil and gas – is the biggest single cause of today’s climate change. It is widely acknowledged that we need to stop using them as soon as possible yet they still provide around 60% of the electricity in the UK and cause up to 85% of our greenhouse gas emissions. We currently burn fossil fuels to provide heat, light, cooling, ventilation and hot water. We burn them to power our electrical appliances and to power our cars and lorries. Instead of rapidly transitioning to alternative sources of energy, the UK government continues to approve new coal mines and oil fields and to grant hundreds of licences for the exploration of new oil fields. Fossil fuels pollute the water and the air we breathe, leading to around 30,000 deaths in the UK each year.

What can we do to help?

The solutions exist – Zero Carbon Britain has calculated how we can provide 100% of our energy needs from renewables and Zero Carbon Dorset has devised a similar plan in relation to our own county – but they rely on large infrastructure projects rather than individual actions. There are, however, some very important things we can do as individuals and communities.

- Support local renewable energy projects and the large-scale solutions listed overleaf. Respond positively to consultations, volunteer your time to promote them, speak to your family, friends and neighbours about how vital it is to transition away from fossil fuels



- Vote for MPs and councillors who are in favour of renewable energy projects
- Join up with any neighbourhood “micro-grids” that may be set up near you

If you can afford it:

- Replace all gas appliances with electric and disconnect from the gas grid
- Install solar panels or even a wind turbine!

What do you think?

- If public transport was much improved and there was a car-share scheme in the town, could you manage without owning your own car?
- If we continue burning fossil fuels at the current rate, how long do you think human civilisation will last?

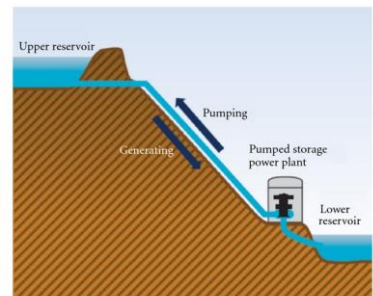
What else can be done?

Installing renewable infrastructure within Dorset so we can provide all our own energy needs would provide several benefits. Our energy would be clean, with no contribution to greenhouse gas emissions and no air pollution; it would be cheaper, especially if owned by the community; it would be more secure, freed from the ups and downs of the oil and gas markets; it would provide lots of good, local jobs. There is plenty of opportunity for generating enough power locally, from onshore and offshore wind, wave and tidal power, solar and geothermal sources.

Some small-scale projects could be completed by individuals, community schemes and councils, but the bulk of the investment needed would have to come from central government. This is perfectly possible, except that the political will to do it is missing from our politicians, so we need to heavily lobby our MPs and government and encourage our councils to do so as well.

Reliability

It's true that the electricity generated from renewables does not always match the times when it's needed, but Zero Carbon Britain have done extensive research into this problem. They have shown that with a combination of usage reduction, habit change, batteries, heat storage, pumped storage, smart demand management and backup biogas power plants, the electricity supply can be guaranteed 100% of the time.



Keywords for further research

Springhead Trust; Blandford Hill Eco Hub; Ridgewater Energy; Dorset Community Energy; North Fossil Farm; Dorset LEP; Navitus Bay wind farm; Rampion wind farm; biogas; synthetic gas