ENVIRONMENTAL AWARENESS

Our autumn programme kicked off in September with a presentation I gave on geothermal energy. Mankind has been exploiting "the heat beneath our feet" in the form of hot springs for thousands of years. But in recent years it's been put to an increasing variety of uses, including electricity generation. At present it's feasible only in areas where underground hot-water reservoirs can be found relatively near the surface — which normally means areas of high volcanic activity. So it's not surprising that while countries like Iceland and the Philippines produce a large proportion of their electricity this way, geothermal power generation is virtually unknown in most of Europe.

The next generation of so-called enhanced geothermal systems (EGS) could change all that. Improved techniques for deep drilling and high-pressure water injection mean that geothermal power stations could in principle be set up almost anywhere in the world. But the technology is still experimental, and there are many problems still to be solved, so progress is likely to be slow. Is anything happening here in Britain? Yes, there's a small EGS project underway at the Eden project in Cornwall. When complete (2025?), it should generate enough energy to power and heat the entire site.

For our October meeting we welcomed an external speaker, Hugh Dickson, to tell us about his "ecoretrofit" project. In 2019 he decided to invest in low-carbon technology in a big way. He beefed up the insulation in the loft, in the walls and under the floor of his 1970s bungalow, improved draughtproofing, replaced his gas boiler with an air-source heat pump, and fitted solar panels with battery backup storage. Although both cost and disruption were considerable, he reckons that it was well worthwhile – possibly not in simple economic terms, but certainly in terms of comfort and peace of mind. As an environmental science graduate, he felt that it was important for him to practise what he preached, by making a personal contribution to achieving Net Zero.

Thanks, Hugh, for a stimulating talk. It certainly provoked a lively discussion from our members, even if few of us yet felt ready to embark on anything quite so major!

Unfortunately we had to postpone our scheduled November presentation on alternative ways of powering zero-carbon vehicles because of illness. So we'll have to wait until next year to find out whether hydrogen- or battery-powered cars are better for the environment!

John Eakins