

Teesdale u3a

Are we really aware of the implications of moving to a green economy? Les Knight, the speaker at the January meeting described how the rare earth metals have become essential elements in the move away from fossil fuels.

Over a period, Britain has moved from a post industrial economy of manufacturing towards one where service industries are increasingly important. In this move, rare earth metals, previously of little commercial value, have become vital as we replace carbon fuels with electricity. These metals are needed for the production of highly powerful magnets, necessary for the manufacture of modern electronic equipment, including wind turbines, high speed internet, electric vehicles, aircraft and many other products. There are limited supplies of the ores containing rare earths and their extraction and separation into pure form is a difficult process. To obtain the metals requires the mining of an enormous amount of ore to obtain just a small amount of the metal. Under the Chinese leader, Deng Xiaoping, China had prioritised manufacturing over farming, particularly targeting metals, including the rare earths. By 2000, China had a virtual monopoly over the rare earth production, and was also able to corner the market for the manufacture of batteries. Since then, the situation has improved globally but China still has 60% of the rare earth market and 95% of the battery market. Recycling waste from earlier mining processes has been suggested as a possible alternative source of rare earths but it is not yet clear how we do it. The Parliamentary Select Committee has advised that the UK needs to take a much more active role and there have been several schemes proposed for battery manufacture but investment is required, including from government.

This was a very powerful and thought provoking presentation, well illustrated with up to date material. Members felt that they were now much better informed but were left hoping that politicians also understood how important this issue is and accepted the need to become more actively involved.

The next meeting is on Thursday 22nd February when local historian Chris Lloyd will be speaking on the history of Paton and Baldwin in Darlington.

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