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Underground Coal Gasification Lecture

16th September 2010

For those who attended the Institution of Mechanical Engineers West Cumbria Area Evening Talk at Workington Sixth Form Centre on Thursday 16th September, we were left with the overwhelming question "Why aren't we doing this?".

To read more about this fascinating subject please read this [article](#).

Kenneth Ferguson of UCG Partnership made the long journey from Woking to West Cumbria to tell us about the untapped energy resources that are literally beneath our feet.

Kenneth, who was the CEO of the Coal Authority in 1997, was responsible for the initiative which set up the UCG programme in UK, under the auspices of the Coal Authority, which commenced in 1999, but at the time, this initiative was never taken further than the study stage in this country, whereas Spain and Australia are already developing this technology on an industrial scale.

Kenneth enlightened the audience with a fascinating presentation into the simplicity behind the technology which basically combusts coal seams which are uneconomic to mine in a controlled manner using steam and Oxygen to release Hydrogen and Methane, along with Carbon Dioxide and Carbon Monoxide, which because the low pressures involved can be captured and dealt with at source, leaving the Hydrogen and Methane to be used as energy sources for power generation. A survey undertaken by the (then) Department of Trade and Industry in 2004 estimated that there was 50 billion tons of gasifiable coal in the UK, with 35 billion tons of that being off-shore. This was shown to equate to a generating cost of £47/MWhr which is compared to Wind Turbine costs of £174/MWhr, Clean Coal at £81/MWhr and even Nuclear at £46/MWhr, when CO₂ capture is taken into consideration.

With such a simple proven technology it really does beggar the question why we are not doing this?