

# Our Mining Legacy – Carbon Free Heating

IChemE

One quarter of UK homes and businesses sit on the coalfields with many of the communities built on mining being disadvantaged by their closure. However, clean energy opportunities from the mines could provide significant financial, environmental and wellbeing advantages to these communities in the future.

Following mines being abandoned ground water fills the roadways, galleries and fractures left by the abstraction of some 17 billion tonnes of coal. This mine water is heated by geothermal energy to temperatures of 11-20 °C close to surface, down to 40 °C in lower coal seams. The Coal Authority estimate there is 2.2 million GWh of annually renewing zero carbon geothermal energy within the workings, enough to heat 180 million homes, 25 times more than are in the coalfields.

Jeremy's presentation will outline where the energy is coming from, how it can be used, the financial and climate change advantages and what is presently being done in the UK and across the world. Jeremy Crooks is the Principal Innovations Manager at the Coal Authority.

**Centuria Building, Teesside University**  
**Wed 17 October**  
**17:30 for 18:00 start**

**All interested Engineers, Scientists, Industrialists, Students, Environmentalists, etc., are welcome to attend.**



**IChemE Public Lecture: Our Mining Legacy - Carbon Free Heating**  
**Featuring; Guest Speaker, Jeremy Crooks, The Coal Authority (Head of Innovation)**

The Coal Authority are advancing plans to convert the UK's abandoned coal mines from a liability to an asset of strategic importance to the UK, tackling climate change, providing cleaner air, providing cheap sustainable energy and building stronger communities.