



STATEMENT

11th October 2017

UK Geoenergy Observatories

The British Geological Survey (BGS) is delivering a £31m investment in two subsurface (underground) research field sites to deliver new geological evidence that will advance our understanding of the subsurface environment and underpin the development of new energy science.

The Cheshire Energy Research Field Site will attract world-leading geologists, engineers and other scientists to undertake energy-related research through close and long-term observation of the way that gases and fluids move around in the subsurface, within different rock types and between different rock layers (from depths of 25m down to 1,200m).

The Cheshire Energy Research Field Site is not dependent on fracking taking place to deliver vital new geological evidence. The observation boreholes will not go into the Bowland Shale.

The subsurface observatory will advance our understanding of the technologies and science needed for a low-carbon economy, of the natural resources below our feet and of other ways that the UK currently makes use of the subsurface.

The subsurface environment can be used to develop a mix of low-carbon energy technologies at the required scale - whether that's for carbon dioxide (CO₂) storage, energy storage, geothermal energy, hydrogen production, lower-carbon energy sources or subsurface storage of waste material. The UK also makes extensive use of the subsurface for water, pipelines, tunnels, building materials, landfill, drainage and more.

It is vital that the UK builds the best-possible geological evidence base to be able to optimise the use of the subsurface without an adverse impact on the environment.

Providing the very best evidence base on UK geology has been the role of the BGS for the last 180 years. As the UK's leading research centre in geoscience, this continues to be our primary objective.

The British Geological Survey is delivering the subsurface observatories on behalf of the whole of the UK science community as part of the UK Geoenergy Observatories research programme. They will be available for all scientists in the UK to conduct research that will provide fundamental new knowledge about the subsurface environment over the next 15 years.

The Cheshire Energy Research Field Site will provide researchers with a complex geological environment that will enable them to examine the way that different rock types behave at varying depths as a result of natural environmental change and impact from major infrastructure, industry and population centres.

This investment will provide industry, academia, regulators, government and the public with the tools to break new boundaries in energy science, develop better low-carbon solutions and take care of the environment.

The observatories will operate alongside other research infrastructure owned by the Natural Environment Research Council (NERC). NERC invests more than £300m each year into advancing the frontier of environmental science, by commissioning new research, training and capital investments that deliver valuable scientific breakthroughs.

Ends



For further details or to arrange media interviews please contact:

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Notes for Editors

Further information on UK Geoenergy Observatories can be found here on the BGS website:
<http://www.bgs.ac.uk/research/energy/esios/home.html>

For additional information on the BGS go to: www.bgs.ac.uk

The British Geological Survey

The British Geological Survey (BGS), a component body of the Natural Environment Research Council (NERC), is the nation's principal supplier of objective, impartial and up-to-date geological expertise and information for decision making for governmental, commercial and individual users. The BGS maintains and develops the nation's understanding of its geology to improve policy making, enhance national wealth and reduce risk. It also collaborates with the national and international scientific community in carrying out research in strategic areas, including energy and natural resources, our vulnerability to environmental change and hazards, and our general knowledge of the Earth system. More about the BGS can be found at www.bgs.ac.uk.

The Natural Environment Research Council

The Natural Environment Research Council (NERC) is the UK's main agency for funding and managing world-class research, training and knowledge exchange in the environmental sciences. It coordinates some of the world's most exciting research projects, tackling major issues such as climate change, food security, environmental influences on human health, the genetic make-up of life on earth, and much more. NERC receives around £300 million a year from the government's science budget, which it uses to fund research and training in universities and its own research centres. www.nerc.ac.uk