



MEDIA RELEASE

April 27th 2018

PLANS SUBMITTED FOR GEOTHERMAL ENERGY RESEARCH OPPORTUNITY IN CLYDE GATEWAY

Two of the UK's leading scientific agencies have submitted plans for an exciting new research development proposed for the Clyde Gateway area in the east end of Glasgow.

The focus of the research at the Glasgow Geothermal Energy Research Field Site would be geothermal energy. It is one of two sites proposed in the £31 million UK Geoenergy Observatories Project led by The Natural Environment Research Council (NERC), the UK's main agency for funding environmental sciences, and the British Geological Survey (BGS), the UK's principal provider of impartial geological evidence since 1835. This major project will provide infrastructure for future research opportunities. The second site is proposed for Cheshire.

The Glasgow Geothermal Energy Research Field Site would be a £9 million project to explore the potential of geothermal energy for the benefit of local communities, as well as innovation and research into the subsurface. The project aims to create an opportunity for research in relation to the geothermal energy potential of the warm waters in the large expanse of disused coal mines under Glasgow. It may be possible to use that water to heat homes and businesses and store waste heat for future use.

The field site proposed for the Clyde Gateway area would comprise a number of boreholes of various depths to create the opportunity to research the area's geology and underground water systems. Measurements would be taken from boreholes, such as temperature, water movement and water chemistry, and the data will be monitored and assessed in the coming years.

The BGS's chief geologist for Scotland, Diarmad Campbell, said: "The UK Geoenergy Observatory in Glasgow would further our understanding of the shallow geothermal energy contained within flooded mineworkings. It would help us to better understand that environment and to determine whether the warm water within the mineworkings below UK towns and cities could provide a sustainable heat source to help power the future."

The BGS held a community engagement event in Dalmarnock in September 2017 and has since been consulting with local stakeholders and residents. The BGS has been working on the technical details for the Observatory and has now (April 2018) submitted planning applications for 22 boreholes over seven locations area to Glasgow City Council and South Lanarkshire Council for consideration.

The observatory boreholes would enable environmental baseline observation and mine characterisation, providing a real environment for scientists to research the potential of using the heat from the UK's flooded mineworkings. The observatory would be operational over a 15-year lifespan and open to the whole of the UK science community to undertake research. Real-time data from state-of-the-art sensors would feed from the boreholes to an online portal that would be open, free and accessible to all.

Professor of Geological Engineering at the University of Strathclyde and Chair of the UK Geoenergy Observatories Science Advisory Group Professor Zoe Shipton said: "We need low-carbon heat sources that are close to the consumer. This therefore means that geothermal heat resources will be developed below our towns and cities. The whole of the science community has committed to work together to create observatories to gather the data we need to



understand the rocks and tunnels so we can extract heat from similar sites safely and with minimal impact to local people.”

Find out more about the Glasgow Geothermal Energy Research Field Site at www.bgs.ac.uk/ukgeoenergyjobs

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NOTES FOR EDITORS:

1. BGS, a component body of 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. BGS maintains and develops the nation's understanding of its geology to improve policymaking, 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.
2. 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.
3. The UK Geoenergy Observatories project will establish new centres for research into the subsurface environment and provide opportunities to research how natural processes can control resource availability, and how natural resources can be used responsibly for present and future generations. The knowledge they generate will contribute to an understanding of new low-carbon energy technologies both in the UK and internationally. The capital project is NERC's response to the British government's announcement in the 2014 Autumn Statement that it would create world-class subsurface energy research test centres through NERC, operated by the British Geological Survey.
4. The planning applications will be available for the public to view and make comments on the Glasgow City Council planning portal (www.glasgow.gov.uk) and South Lanarkshire Council planning portal (www.southlanarkshire.gov.uk). The validation references for the Glasgow application are: **18/01012/FUL** and **18/01012/FUL**. The South Lanarkshire application is currently being validated and the validation references are, therefore, not yet known.
5. The second site is proposed for Cheshire and the planning application for this site will be made later in the year.

For further details or to arrange media interviews please contact:

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