What does CO$_2$ geological storage really mean?

Far from adding 'hot air' to the climate change debate, a network of scientists are leading the way on capture and storage of carbon dioxide underground.

CO2GeoNet, the European Network of Excellence on geological storage of carbon dioxide, is organising an international training and dialogue workshop aimed at providing information and generating discussion about the technical aspects of geological CO$_2$ storage on Wednesday October 3rd at Salons Hoche, Paris, France.

CO2GeoNet is co-ordinated by the British Geological Survey and comprises 13 leading geotechnical and environmental partner institutes across Europe.

Dr. Nick Riley MBE, Head of Science for Energy at BGS and co-ordinator of CO2GeoNet said, "The vision is to store CO$_2$, captured from large single point emission sources such as coal-fired power plants, within old oil and gas fields or other geological formations beneath the seabed. In January 2007, the European Commission stated that by 2020 all new coal-fired plants should include CO$_2$ capture and storage (CCS) technology and existing plants should also follow. In the Energy White Paper 2007, the UK Government announced its intention to hold a competition to develop the UK’s first commercial-scale demonstration of CCS. A key step for CO2GeoNet is to ensure that key stakeholders understand what is involved. This workshop will provide a very useful opportunity to gain greater understanding and for any questions to be answered".

The workshop entitled 'What does CO$_2$ geological storage really mean?' is chaired by Isabelle Czernichowski-Lauriol, CO2GeoNet network manager.
Many potential stakeholders have expressed a wish to understand how this technique works. This workshop is designed to meet this need, raising awareness and promoting discussion about this technology. Policy makers, industrial operators, investors, economists, regulators, NGO’s, scientists and students will hear presentations based on experience gained over more than a decade of research and demonstration projects worldwide.

Capturing CO₂ at large industrial units, particularly fossil fuel based power plants, and storing it underground is a top priority in the race to significantly reduce atmospheric emissions of greenhouse gases and thus help mitigate climate change and ocean acidification. The technology has now reached a transition stage between research and worldwide deployment. By storing CO₂ underground, the carbon released from burning coal, oil and gas is returned to where it was extracted from, rather than releasing it into the atmosphere.

Ends

For further details or to arrange media interviews please contact:

Dr. Marie Cowan,
BGS Press Office,
Kingsley Dunham Centre,
Keyworth,
Nottingham,
NG12 5GG
Telephone: +44 (0)28 9038 8462
Fax: +44 (0)28 9038 8461
Mobile: 0781 4212644
E-mail: mtc@bgs.ac.uk
Notes to Editors:

The workshop programme looks at six key questions which are:

1. Where and how much CO$_2$ can we store underground?
2. How can we inject large quantities of CO$_2$?
3. What is the fate of CO$_2$ in the storage reservoir and are there any related physical and chemical changes?
4. Could CO$_2$ leak from the storage reservoir and what would be the effects on humans and ecosystems?
5. How can we monitor the storage site at depth and at the surface, and why is this necessary?
6. What safety criteria i.e. conditions for safe storage, need to be imposed and respected?

CO2GeoNet Network of Excellence partners are:

- British Geological Survey, United Kingdom
- Bundesanstalt für Geowissenschaften und Rohstoffe, Germany
- Bureau de Recherches Geologiques et Minieres, France
- Geological Survey of Denmark and Greenland, Denmark
- Herriot-Watt University, United Kingdom
- Institut Français du Pétrole, France
- Department of Earth Science and Engineering, Imperial College London, United Kingdom
- Norwegian Institute for Water Research, Norway
- National Institute of Oceanography and Experimental Geophysics, Italy
- International Research Institute of Stavanger, Norway
- SINTEF Petroleum Research, Norway
• Netherlands Organisation for Applied Scientific Research, The Netherlands
• Universita di Roma "La Sapienza" - Fluid Geochemistry Group, Italy

More information may be found at CO2GeoNet Website:
http://www.co2geonet.com/

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.