



## The Scottish Earth Science Education Forum (SESEF) Carbon Capture and Storage CPD training for Teachers

This innovative CPD course aims to bring the ground-breaking science of Carbon Capture and Storage into the classroom in an engaging suite of lessons aimed at S1/S2 pupils.

This one day course will take teachers through a suite of lessons which have been designed to achieve many of the outcomes in *A Curriculum for Excellence*, encouraging pupils to use experimental work as the basis for in-depth discussion, team working and the development of higher order cognitive skills. The lessons use both experimental and discussion-based activities to approach the issue of global climate change, examining the causes for increased concentrations of atmospheric CO<sub>2</sub> asking pupils to explore their own contributions to this while examining their values and attitudes.

Laboratory based experiments enable pupils:

- *investigate the processes involved in generating electricity (and CO<sub>2</sub>) in power stations*
- *use the process of combustion to produce electricity*
- *examine the processes involved in carbon capture and storage*
- *work in teams to examine the properties of carbon dioxide, geology, pressure and the health and safety implications of storing carbon dioxide*
- *work collaboratively to design a safe storage system for carbon dioxide*
- *build a model storage system for carbon dioxide and test its viability as a safe and efficient storage system*

The course was designed specifically for teachers of science, but with the intention of extending the resources for use in other subject areas such as geography, philosophy, RME. Teachers of these subjects who would like an opportunity to learn about this new technology are welcome to apply to attend the course. We would appreciate their feedback on ways of branching into other subject areas.

This course has been delivered to over 100 teachers and delivered for providers such as **SSERC, LTS, ASE** and **Highlands and Islands Council**. The classroom lessons were piloted in schools in Fife and Clackmananshire with almost 200 school children with remarkable success and with extremely positive feedback from classroom teachers.

*“Thank you very much for all that you've done for us through SESEF's CCS project. We've had a great time and learned lots. It's been hard work but has refreshed the way I look at my job and we've all enjoyed it”* **Marie Littlejohn, Linlithgow Academy**



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The carbon capture and storage course will run in 3 local authorities in May and June 2011 and teachers within these areas are eligible for a subsidised place. There are also a few 'free' spaces reserved in each authority and these are generally allocated to teachers in the host school or one free place to science teachers who bring a colleague from another department e.g. geography).

- **Fife – Kirklands High School, 30<sup>th</sup> May 2011**
- **Falkirk – Larbert High School, 2<sup>nd</sup> June 2011**

The subsidised cost of the course is £35.00 (**this includes booking, lunch, 1-full day training and take away starter resources**). To reserve your place on the course, please contact Meredith Corey [mcorey.sesef@gmail.com](mailto:mcorey.sesef@gmail.com) for a registration form.

There is also a third opportunity for teachers from Highland, Aberdeen and Aberdeenshire to participate:

- **Aberdeen – Hazelhead Academy, 27<sup>th</sup> May 2011**

There is a mixture of free places and subsidised places available on this course. To reserve your place on the course or to find out if you are eligible for a free place, please contact Meredith Corey [mcorey.sesef@gmail.com](mailto:mcorey.sesef@gmail.com) for a registration form.