

## How CCS works – and why we need it

The facts and misconceptions of carbon capture and storage (CCS) were discussed last night at a free public lecture held at the University of Melbourne and presented by the Cooperative Research Centre for Greenhouse Gas Technologies (CO2CRC).

A large audience at the public lecture, titled *Carbon Capture and Storage under the Spotlight*, heard three eminent experts in their fields address many of the misunderstandings surrounding CCS, the technical, economic and social challenges, and the research and development underway around the world to address them.

Professor Ross Garnaut (Vice-Chancellor's Fellow, University of Melbourne), set out the developments in global emission reductions since his report of 2008 and highlighted the importance of maintaining and accelerating research and development into low emission technologies. Professor Garnaut was firm that a carbon price, preferably as part of a global system, is needed to drive mitigation efforts and support R&D.

Mr Barry Hooper (Chief Technologist CO2CRC) discussed the hows and whys of CCS, in particular capture technology. Capture of carbon dioxide from industrial sources is by far the most expensive part of CCS and Mr Hooper discussed the excellent prospects for substantial cost reductions, particularly from CO2CRC research, as well as the progress being made in large scale projects here in Australia and around the world.

The final speaker was Dr Peter Cook, Chief Executive of CO2CRC and an expert in the storage side of CCS.

Dr Cook set out how geological storage works, the risks and how they are managed, and the large scale projects underway around the world. He went into some detail on the successful operation and monitoring of the CO2CRC Otway Project, currently the only geological storage project in Australia.

The lecture concluded that while it is impossible to be certain on the final mix of technologies we will need to reach our greenhouse gas mitigation targets, every possibility needs to be explored. As international agencies such as the International Energy Agency and the IPCC see carbon capture and storage as having the potential to meet nearly a fifth of the global emissions reductions needed by 2050, it is an essential part of the portfolio of low emission technologies now under development.

**Slides and audio from the lecture are now online at [www.co2crc.com.au](http://www.co2crc.com.au)**

*The lecture was part of the University of Melbourne Public Lecture Program and was supported by CO2CRC, the Melbourne Energy Research Institute and the University of Melbourne School of Engineering.*

**Further information:** Dr Peter Cook, +61 2 6120 1600, 0419 490 044, [pjcook@co2crc.com.au](mailto:pjcook@co2crc.com.au)

**Media assistance:** Tony Steeper, 0417 697 470, [tsteeper@co2crc.com.au](mailto:tsteeper@co2crc.com.au)

---

CO2CRC collaborates with leading international and national CCS experts to conduct world-class research into carbon capture and storage. Organisations participating in CO2CRC research include CSIRO, Geoscience Australia, the Universities of Adelaide, Curtin, Melbourne, Monash, NSW, Queensland and Western Australia, GNS Science (NZ), the Alberta Research Council of Canada and the US Lawrence Berkeley National Laboratory.

Industry and State core partners supporting CO2CRC are Anglo American, ANLEC R&D, BG Group, BHP Billiton, BP Australia, Chevron, Foundation for Research Science and Technology (NZ), INPEX, KIGAM, Mitsui, NSW Industry & Investment, QER, QLD Department of Mines and Energy, Rio Tinto, Sasol, Schlumberger, Shell, Solid Energy, Stanwell, Total, the Victorian Department of Primary Industries, WA Department of Mines and Petroleum and Xstrata.