

IEA Greenhouse Gas R&D Programme - Overview

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IEA Greenhouse Gas R&D Programme



- A collaborative research programme founded in 1991
- Aim: Provide members with definitive information on the role that technology can play in reducing greenhouse gas emissions.
- Producing information that is:
 - Objective, trustworthy, independent
 - Policy relevant but NOT policy prescriptive
 - Reviewed by external Expert Reviewers
 - Subject to review of policy implications by Members
- IEA GHG is an IEA Implementing Agreement in which the Participants contribute to a common fund to finance the activities. Funding approx 2.5 million \$/year.





























































































IEA GHG Studies > 120



Implementation Support

- Methodology for CCS projects under CDM
- Guidelines for CCS site characterisation
- CCS Project Financing
- Regional capacity for CO₂ storage in India

Regulatory Support

- Risk assessment and regulatory needs
- Environmental impact assessment for CCS
- Capture-ready power plant (IEA/G8)
- Monitoring Selection Tool

Technical Assessments

- Improved solvent scrubbing processes for CO₂ capture
- Capture of CO₂ from medium scale installations
- Improved Oxygen production processes
- Collection of CO₂ from distributed sources
- CO₂ Capture in the cement industry
- Co-production of hydrogen and electricity
- Remediation of leakage from geological storage
- Fuel Cells for CHP
- CO₂ Pipeline transmission costs

International Research Networks



Capture

- Capture
- Oxy-fuel Combustion
- High Temperature Solid looping Cycles
- Social Research
- Biofixation

Storage

- Risk Assessment
- Monitoring
- Well Integrity
- Modelling

Practical R&D Activities



Systems Studies/Capture

- DYNAMIS
- International Test Centre

Technical Reviews

- US REGIONAL PARTNERSHIPS
- US EPA VUNERABILITY
 ASSESSMENT FRAMEWORK
- OTWAY BASIN PILOT PROJECT
- WEYBURN
- RECOPOL







Storage Projects

- WEYBURN
- SACS/CO2STORE
 - CO2REMOVE
 - CO2SINK
 - MOVECBM



Greenhouse Gas Technologies Conference (GHGT)



- Premier International GHG conference
- Focused on CCS
- Held every two years
- GHGT-8, 2006 Trondheim, Norway
 - 950 Delegates
- GHGT-9, 2008 Washington, USA
 - 16th 19th November
 - ~1500 Delegates
- GHGT -10, 2010 Amsterdam, Netherlands
- www.ghgt.info

International Workshops/Networks



- 2nd CCS Finance workshop held in New York in May 2008
 - With IEA CCC and WCI
- IEA Regulators Network
 - IEA GHG working with IEA and UCL to joint-organise
 - Regular 'webinars' on range of topics

http://www.iea.org/Textbase/subjectqueries/ccs/ccs_legal .asp

- Leakage impacts R&D (experts meeting) Sep '08 and 2010 tba
- Sustainable Development and CCS tba

Education and Capacity Building



- Summer Schools
 - Germany 2007
 - Canada 2008
 - Melbourne 2009
 - Norway 2010
- CCS in Africa. Workshops in Senegal and Botswana, 2007
- Capacity building elements to GHGT9 and GHGT10

Communications

- Websites
 - www.ieaghg.org
 - www.ghgt.info
- Newsletter
 - 6200 paper copies, Increasing length
- Glossy Reports

 Voluntary Carbon Offsets, Geological Storage of Carbon Dioxide, Carbon

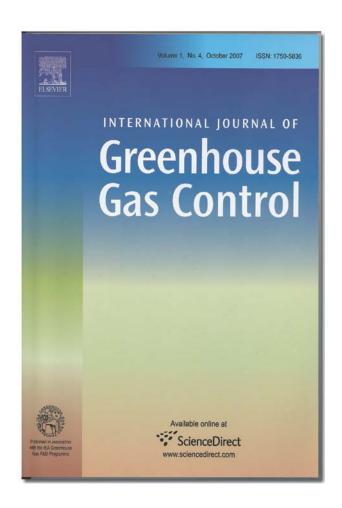
Capture and Storage, etc.



GHG Journal



- International Journal on Greenhouse Gas Control launched
 - Released Quarterly
 - Peer reviewed
 - Original research
 - 6 issues per year planned
- www.elsevier.com



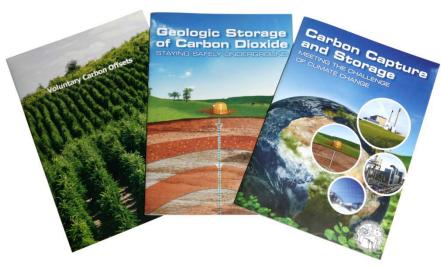
Collaborations



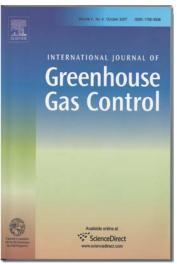
- GCCSI
- CSLF
 - Collaboration Arrangement with CSLF Technical Group
 - Collaborate/contribute in Risk, Capacity, Academic Task Forces,
 - IEA GHG Student Forum planned with CSLF, web-based
- IEA/CSLF/G8 Near Term Opportunities Work
 - IEA GHG member of Organising committee
- APP Programme Oxy Fuel working group
 - Shadowing our Oxy Fuel network meeting
- EU ZEP
- IEA Regulators Network
- IPAC

IEA Greenhouse Gas R&D Programme

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GHGT-10

19th – 23rd November 2010 Amsterdam

www.ghgt.info







Thank you

