



IEA Greenhouse Gas R&D Programme



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# **1<sup>st</sup> Joint Network Meeting**

**Co-organisers and sponsors: EPA**  
**Sponsors: EPRI and OXAND**

**New York – 11-13 June 2008**





# 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
- Activities: Studies (>120); R&D networks :- Wells, Risk, Monitoring, Oxy, Capture, Biofixation; Communications (GHGT9, IJGGC, etc); facilitating and focussing R&D and demonstration activities
- Funding approx 2 million €/year (2.6 million \$/year).

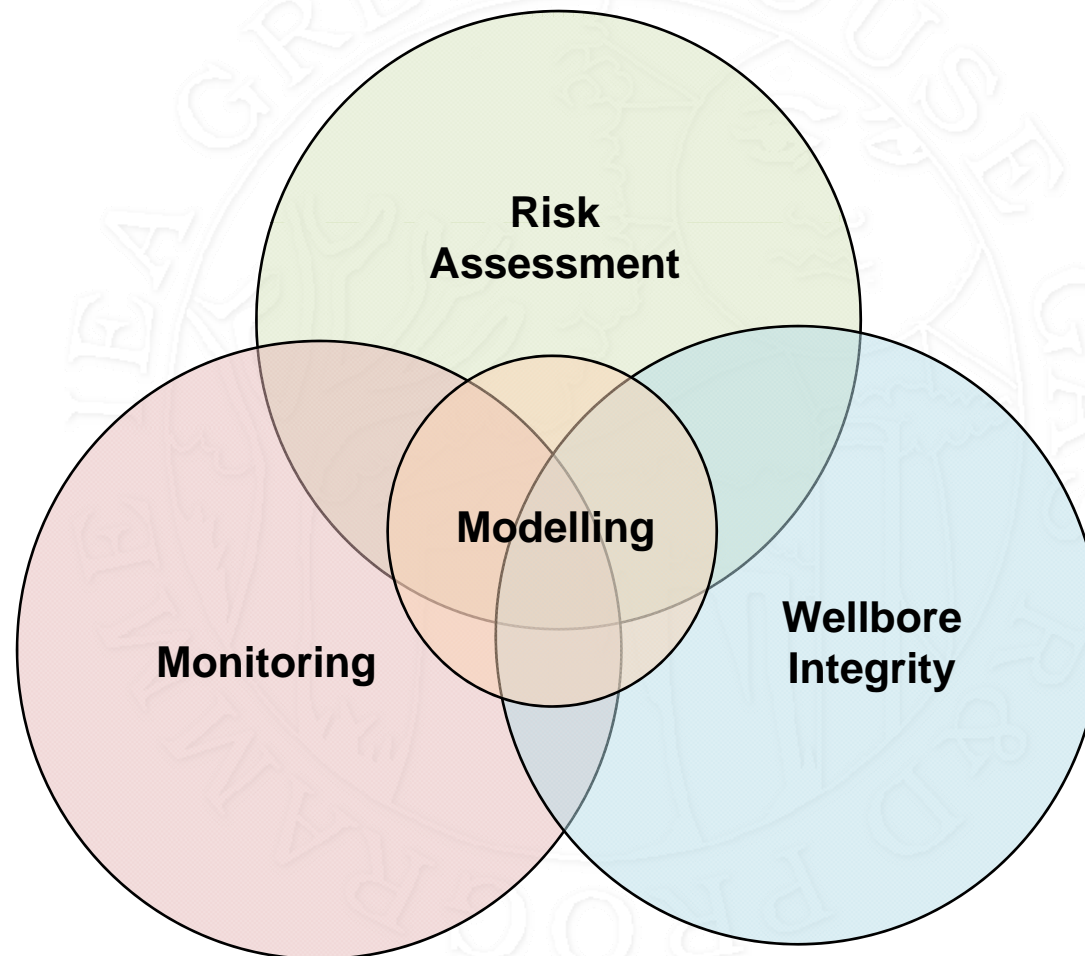


# R&D Networks

- Bring together international key groups of experts to share knowledge and experience
- Identify and address knowledge gaps
- Act as informed bodies, eg for regulators
- CO2 geological storage – assessing and managing risks
- Started in 2004/5
  - Monitoring Research Network
  - Risk Assessment Research Network
  - Wellbore Integrity Research Network
- Benefit experts and wider stakeholders
- but - depend on experts' time and inputs – valuable and widely appreciated



## Storage Networks Overlap





## IPCC Guidelines for GHG Inventories



- Apr 2006. Vol 2 Energy, Chp 5 - *CO2 Transport, Injection and Geological Storage*
- Emission factor approach not possible - natural variability of storage sites and lack of empirical evidence – so approach based on **measurement and monitoring** and on a **site-by-site** assessment

- Methodology

**Site characterisation** – inc leakage pathways



Assessment of risk of leakage – **simulation / modelling**



**Monitoring** – monitoring plan



Reporting – inc CO2 inj and emissions from storage site

- For appropriately selected and managed sites, supports **zero leakage** assumption unless monitoring indicates otherwise



## Joint Network Meeting

### Aims

- Review storage-related networks
- Enhance links between these networks
- Identify any gaps, and duplication
- Consider role of modelling in networks
- Leverage cross-network expertise
- Refine future focus and priorities of networks



## Workshop agenda

1. Networks status review and collaboration thoughts
  - Breakout session (by network)
2. Modelling
  - Breakout session (by network)
3. CCS project phases – application and role of networks
  - Breakout session (mixed)
4. Networks summary and future work
  - Breakout session (by network)
5. Conclusions and next steps



## Breakout Groups

- For the three Network Specific Breakout groups the chairs and IEA GHG staff representatives will be as follows:
  - **Wellbore Integrity** – Bill Carey (Chair), Craig Gardner (co-chair), Toby Aiken (IEA GHG Staff)
  - **Risk Assessment** – John Kaldi (Chair), Claudia Vivalda (co-chair), Neil Wildgust (IEA GHG Staff)
  - **Monitoring** – Kevin Dodds (Chair), Rick Chalaturnyk (co-chair), Brendan Beck (IEA GHG Staff)





## Breakout Groups

- For the four Cross-network Breakout groups the chairs and IEA GHG staff representatives will be as follows:
  - **Group 1** – Tony Espie (Chair), John Kaldi (co-chair), Neil Wildgust (IEA GHG Staff)
  - **Group 2** – Gabriel Marquette (Chair), Anhar Karimjee (Co-chair), Tim Dixon (IEA GHG Staff)
  - **Group 3** – Rick Chalaturnyk (Chair), Isabelle Czernichowski (co-chair), Brendan Beck (IEA GHG Staff)
  - **Group 4** – Dick Rhudy (Chair), Laurent Jammes (co-chair), Toby Aiken (IEA GHG Staff)



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