



IEA Greenhouse Gas R&D Programme



# IEA Greenhouse Gas R&D Programme Update

Tim Dixon

CSLF – April 2008





# IEA Greenhouse Gas R&D Programme

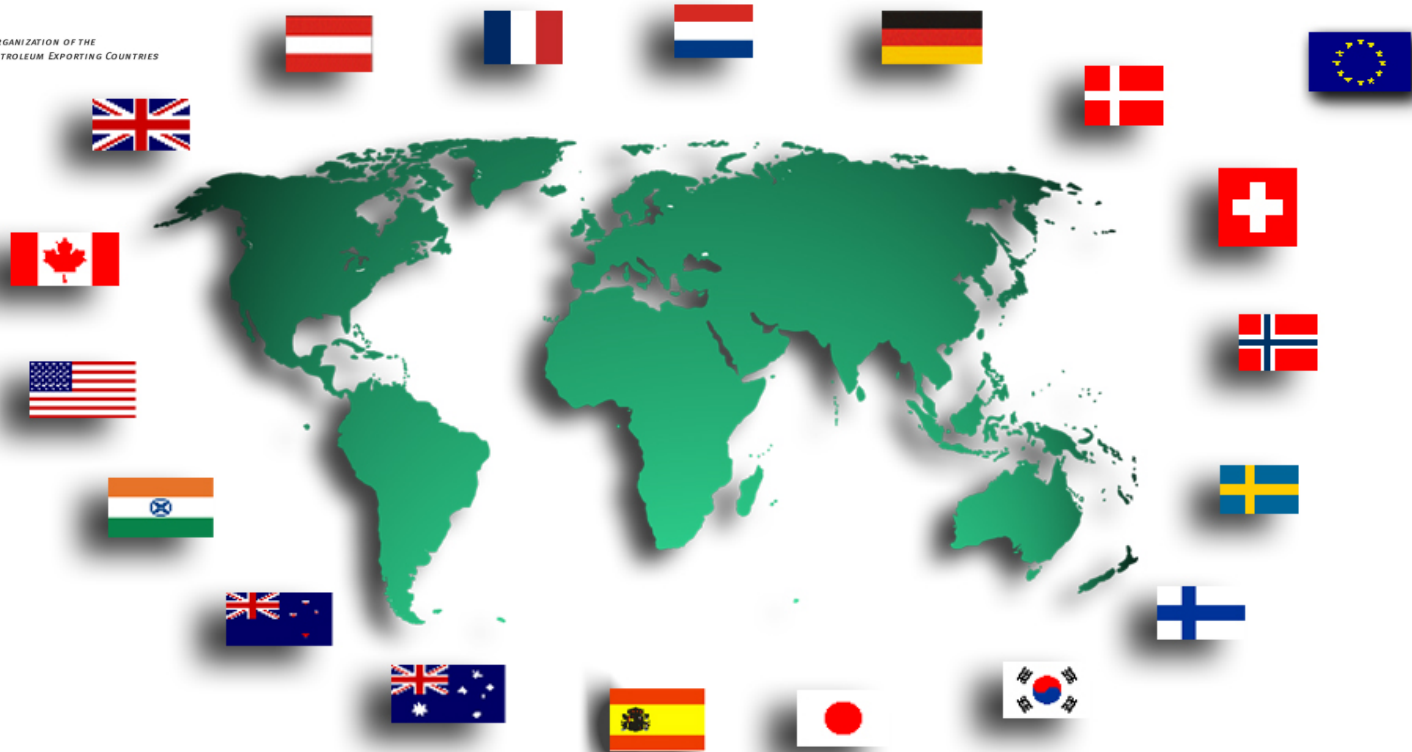
- A collaborative research programme founded in 1991
- Aim: *Provide members with definitive information on the role that technology can play in reducing greenhouse gas emissions.*
- Producing information that is:
  - Objective, trustworthy, independent
  - Policy relevant but NOT policy prescriptive
  - Reviewed by external Expert Reviewers
  - Subject to review of policy implications by Members
- Activities: Studies (>100); 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).



# IEA Greenhouse Gas R&D Programme



 OPEC ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES



ALSTOM



BG GROUP



CEZ GROUP



ConocoPhillips



EniTecnologie

e-on

EPRI

ExxonMobil

REPSOL YPF



Schlumberger



Statkraft

STATOIL



TOTAL

VATTENFALL



[www.ieagreen.org.uk](http://www.ieagreen.org.uk)

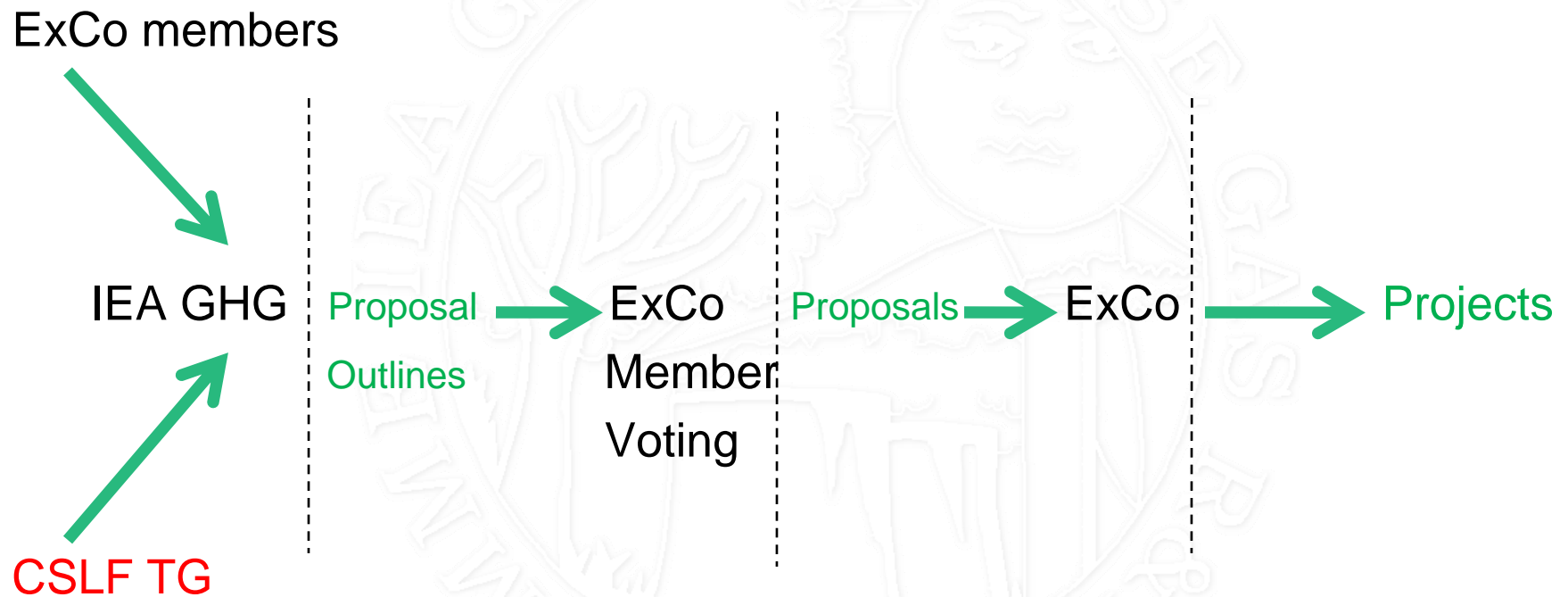


## Arrangement between CSLF Technical Group and IEA GHG

- How CSLF TG/PIRT and IEA GHG will interact for mutual benefit through increased co-operation
  - Mutual representation of each at CSLF TG and IEA GHG ExCo (no voting)
  - Liaison with PIRT co-chairs to discuss potential activities or projects – two way process
  - Activities would require approval by ExCo or TG
  - Due reference to org providing the resource
- Endorsed at ExCo Oct07 and TG Jan08



## IEA GHG – Project generation





## Shortlisted projects being proposed to ExCo 22-23 Apr08

- Storage Capacity Coefficients (CSLF TG proposed)
- What have we learned to date?
- plus five others



## Projects underway

- Fuel cells for CHP
- CCS in cement industry
- Pipeline costs
- Removal of impurities
- Assessment of subsea ecosystem impacts
- Improved solvent scrubbing
- Assessment criteria – TAG
- Operating flexibility of power plants with CCS
- Safety
- Novel approaches on capture
- Aquifer storage
- Potential for storage in gas fields



## Projects in process

- CCS in Iron and Steel industry
- Potential for CO<sub>2</sub> EOR
- Retrofit and repowering with CCS
- Best Practice Guidelines on site characterisation (DNV)
- CO<sub>2</sub> storage costs
- Small scale biomass and CCS
- Capturing lower fractions of CO<sub>2</sub>
- Building pipeline infrastructure
- Well abandonment





## Recent and Future meetings

- Oxy-combustion network – Mar 08 Yokohama, Japan
- Wellbore integrity – Mar 08 Paris, France
- IEA Regulators Network – 13-14 May, Paris, France
- Financing CCS Projects – 28-29 May, New York, USA
- Joint Network meeting (Monitoring/Well/Risk) – 11-13 June, New York, USA
- Capture Network, 20-21 May, Vienna, Austria
- Leakage impacts (experts meeting) – Sep, UK
- GHGT9 - 17-19 Nov, Washington, USA

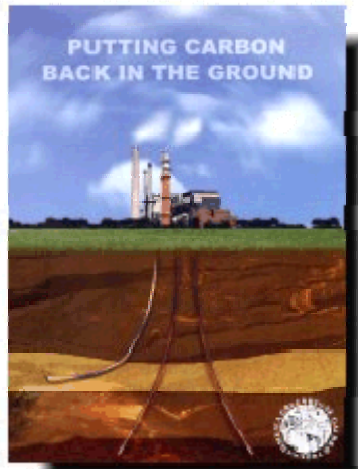


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## IEA Greenhouse Gas R&D Programme

- General - [www.ieagreen.org.uk](http://www.ieagreen.org.uk)
- CCS - [www.co2captureandstorage.info](http://www.co2captureandstorage.info)



**GHGT-9**

**16<sup>th</sup> – 19<sup>th</sup> November  
2009**

**Washington D.C.**

**[www.mit.edu/ghgt9](http://www.mit.edu/ghgt9)**

**[www.ieagreen.org.uk](http://www.ieagreen.org.uk)**