CSLF - Closing the Technology Gaps
Challenges and opportunities to 2050

Establishing the Taskforce June 2012

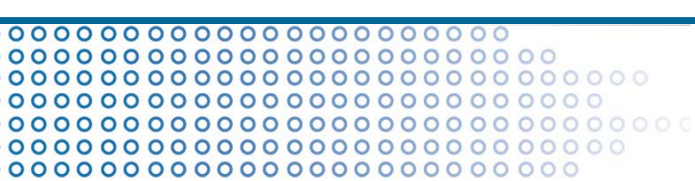**Taskforce Leader**
Dr Richard Aldous (CO2CRC)

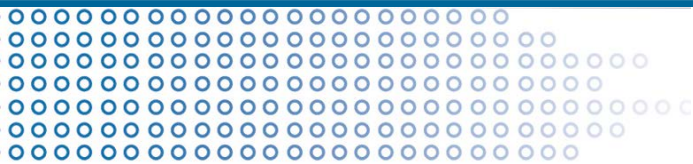# Closing the technology gaps- taskforce

- CSLF Action plan 2011 -2016

- **The TG will identify and monitor key CCS technology gaps and related issues and recommend any R&D and demonstration activities that address these gaps and issues.**

- **Identification   of all key technology gaps/issues and determination of the effectiveness of ongoing CCS RD&D for addressing these gaps**
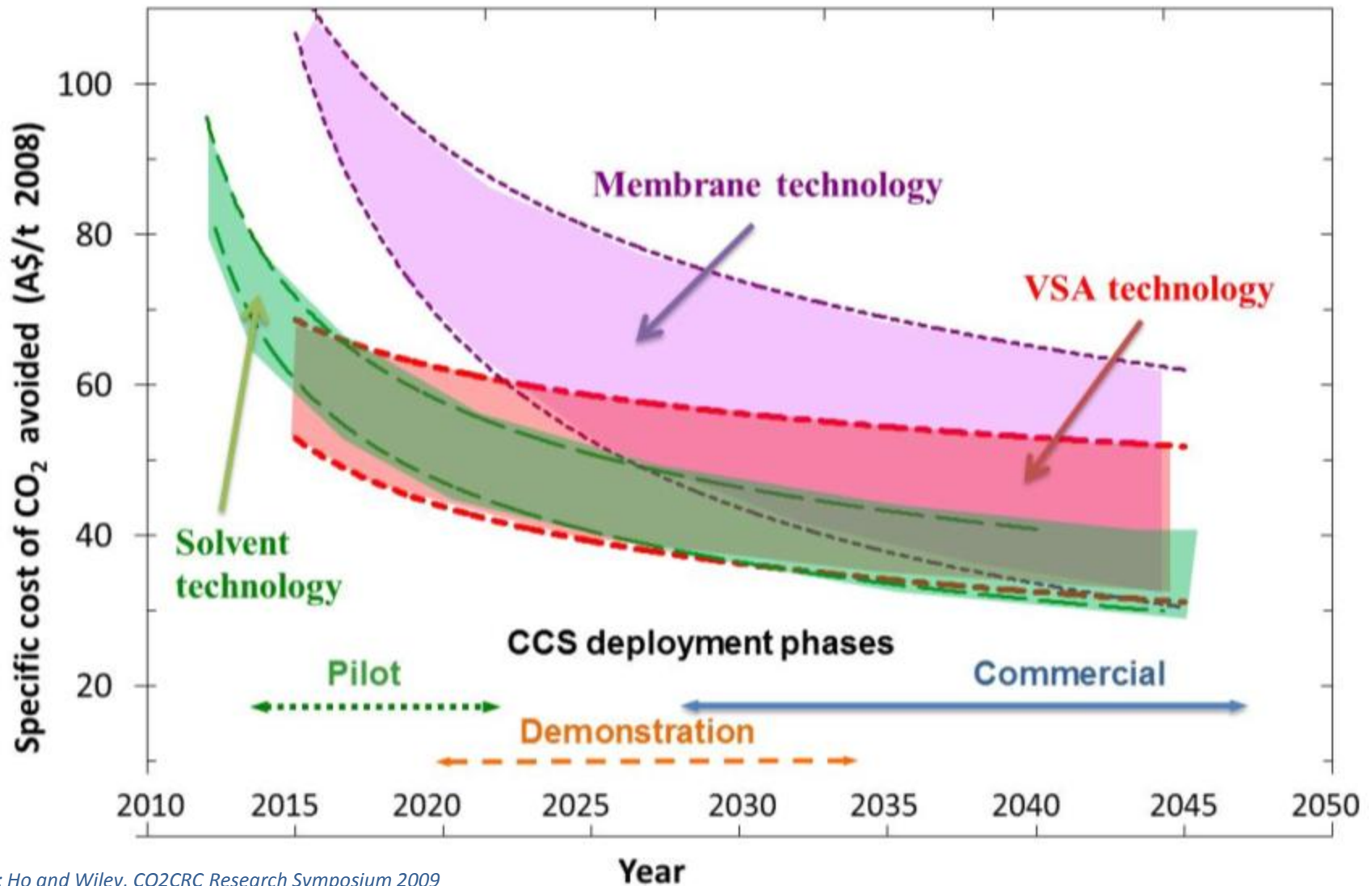
Objectives of the Taskforce

- **Assess status of technology – gaps and opportunities**

- **Potential going forward - to get to 2050 - what will make a difference**

  - Gaps   - the top 10 gaps that can make the biggest difference
  - Opportunities - top 10
  - Challenges for each of the above

- **Closing the gaps (& capturing the opportunities)**

  - Probability and timing
  - Cost , how much will it cost to capture the opportunity
  - Who will do it ? - who are the main players (companies / countries)
  - Collaboration recommendations to G8/G20 on how to improve and get better value for the global expenditure

- **Feed into a Technical roadmap , scenarios to 2050**
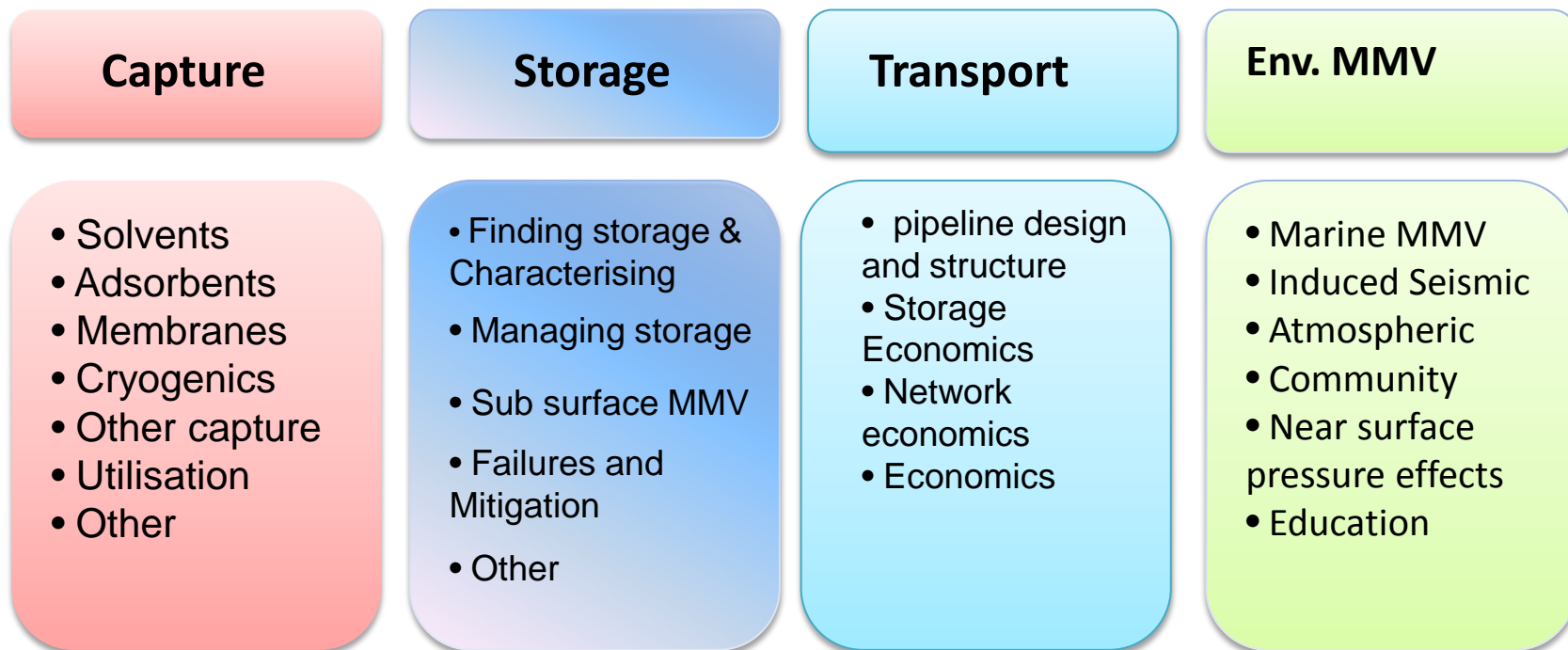
Capture technology development

Source: Ho and Wiley, CO2CRC Research Symposium 2009

Define Technology AREAS

- build on the gaps taskforce work already completed
- what are the AREAS of technology
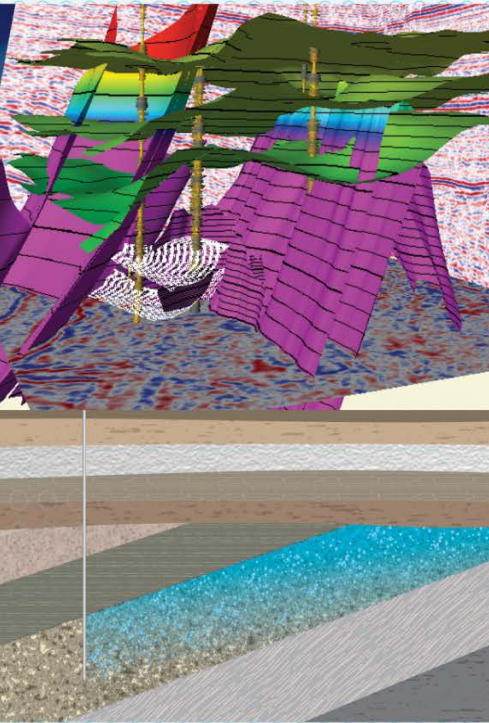- what are the gaps and opportunities in each area

Capture	Storage	Transport	Env. MMV
• Solvents • Adsorbents • Membranes • Cryogenics • Other capture • Utilisation • Other	• Finding storage & Characterising • Managing storage • Sub surface MMV • Failures and Mitigation • Other	• pipeline design and structure • Storage Economics • Network economics • Economics	• Marine MMV • Induced Seismic • Atmospheric • Community • Near surface pressure effects • Education

Approach to producing document

Taskforce :

- **Australia** (Lead)
- **Korea**
- **USA**
- **Norway**
- Each provide 1 person on storage & 1 on capture

- **Note links to other task forces**

- **Prepare for CCS technical Road Map to 2050**

- **Recommendations**
  - How to get faster progress
  - International collaboration on technology development

Time lines

Outline structure to be presented in Perth - Oct 2012

- Prepare AREAS

- Draft gaps in each area – list and rank

- Template for assessment and rank

Draft paper -   March 2013

- **Top 10 gaps defined**

- **Recommendations - how to close gap or capture opportunity**

Links to road Map

- **Links to Roadmap/ scenarios**

- **Final report - mid 2013**