

Task Force to Review and Identify Standards for CO₂ Storage Capacity Estimation
CSLF Task Force Strategic Implementation Report (TFIR)
January 2007

1. Task Force

Standards for CO₂ Storage Capacity Estimation – Phase 2

Previous attempts to assess CO₂ storage capacity used a wide variety of approaches and methodologies that considered various trapping mechanisms, and data sets of variable size and quality, resulting in widely varying estimates of inconsistent quality and reliability. Storage capacity estimates have been produced for Australia, Canada, northern Europe, Japan, USA, and projects are under way to assess the storage capacity in southern and eastern Europe. At its meeting in September 2004 CSLF recognized the need to provide consistent and accepted methodologies for estimating CO₂ storage capacity in developed and developing countries alike and established a *Taskforce for Review and Development of Standard Methodology for Storage Capacity Estimation*. In September 2005 the Taskforce presented the results of Phase 1 in a Discussion Paper in which previous estimates were critically analyzed and gaps in knowledge and/or methodology were identified. Phase 2 of the Taskforce assignment covers definitions, concepts and methodologies to be used in estimating CO₂ storage capacity that should serve as a basis in CSLF member countries for collecting the necessary data and properly estimating the CO₂ storage capacity in geological media in their jurisdiction.

2. Task Force Members

- Stefan **Bachu**, Canada, Chair
- Didier **Bonijoly**, France
- John **Bradshaw**, Australia
- Robert **Burruss**, USA
- Niels Peter **Christensen**, EC
- Sam **Holloway**, UK
- Odd-Magne **Mathiassen**, Norway

3. Purpose of Task Force

- The main goal of the Taskforce is to develop a clear set of definitions and methodologies that will allow:
 - 1) Consistent assessments of CO₂ storage capacity in geological media at various levels based on jurisdiction and/or geological domains that will provide policy and decision makers in government and industry with the necessary information needed for making the right decisions regarding CCS implementation;
 - 2) Comparison of CO₂ storage capacity at various levels (country, basin, regional) and among sites;
 - 3) Understanding of the basis for estimation and critical review of results.
- Performance indicators are:
 - 1) Adoption of the report by the CSLF Technical Group
 - 2) Adoption of definitions and methodologies by CSLF member countries
 - 3) Adoption of definitions and methodologies by other countries
 - 4) Use of the recommended definitions and methodologies by government, research and/or industry groups in producing assessments of CO₂ storage capacity at various levels (country, basin, regional, local and site specific)

4. Milestones

- Phase 2 Report, to be produced in time for the next CSLF Joint Meeting of the Policy and Technical Groups in March 2007
- Recommendations regarding future work at the next CSLF Joint Meeting of the Policy and Technical Groups in March 2007
- Possibly a paper to be submitted to and published in the International Journal of Greenhouse Gas Control, summer 2007
- Inclusion of definition and methodologies in training materials to be produced by the CSLF Capacity Building Task Force

5. Status

- Part 3 of the Phase 2 report has been completed this quarter, on:
 - **CO₂ Storage Capacity in Deep Saline Aquifers**