



## **IEAGHG Information Paper: 2017-IP24; Society of Petroleum Engineer's CO<sub>2</sub> Storage Resources Management System**

The Society of Petroleum Engineers (SPE) have drafted a report to establish technically-based capacity and resource evaluation standards. The "CO<sub>2</sub> Storage Resources Management System" draft report (SPE-SRMS) is currently open for comments until the 31<sup>st</sup> May and can be found on the SPE website:

<http://www.spe.org/industry/geologic-storage-resources-management-system.php>

The SPE CCUS subcommittee is working with the United Nations Economic Commission for Europe (UNECE) to develop the resource management system. The UNECE "Specifications for the Application of the United Nations Classification for Fossil Energy and mineral Reserves and Resources 2009 (UNFC-2009) to Injection Projects for the Purpose of Geological Storage" outlines an overarching classification system which the SPE system aims to be consistent with. This can be found on the UNECE website:

<http://www.unece.org/energy/se/reserves.html>

The SPE have established the management resource system with the aim of developing a method to estimate storage resources that can gain global acceptance. The report draws upon experience from the Petroleum Resources Management System (PRMS) which has been accepted by many organizations and is now in common use internationally. The UNFC-2009 was applied to the PRMS and by working with the UNECE, the SPE will apply the same approach to maintain consistency between the two systems.

Currently several methods exist to describe and estimate storage resources but none have gained global recognition as a 'standard' method. The SPE Storage Resource System is designed to provide a common reference to help improve clarity for national reporting and regulatory purposes and aid global communications regarding CO<sub>2</sub> storage. The SRMS draft states that the "sub-committee will work closely with other organizations to update this document periodically to keep current with common practices and changing commerciality criteria".

The "SPE-SRMS" report contents are as follows:

- Basic Principles and Definitions
  - Storage Resources Classification Framework
  - Project-Based Resources Evaluations
- Classification and Categorization Guidelines
- Evaluation and Reporting Guidelines
  - Commercial Evaluations
  - Injection Measurement
  - Resource Entitlement and Recognition
- Estimating Storable Quantities
  - Analytical Procedures
  - Deterministic and Probabilistic Methods

This draft SPE report provides a detailed description of each of these storage resource classifications and guidelines based on a petroleum resource evaluation approach. This includes commercial considerations as well as different estimation methods.

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