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CSLF Technical Group Meeting – Melbourne, Australia - 17 October 2018

Background

- 2017 PIRT Abu Dhabi
 - Determined need to measure CCUS progress with respect to TRM Technology Recommendations

- 2018 Technical Group Venice
 - Measuring progress on technical recommendations from CSLF Technology Road Map 2017
 - Assessment of impact and usage of Task Force reports
 - Ad Hoc Committee for Task Force Maximization and Knowledge Sharing formed

TRM Technology Recommendations

- Facilitate CCS infrastructure development.
- Leverage existing large-scale projects to promote knowledge-exchange opportunities.
- Drive costs down along the whole CCS chain through RD&D (including more detailed technical recommendations in Annex B).
- Facilitate innovative business models for CCS projects.
- Facilitate implementation of CO2 utilization

TRM Policy Recommendations

- Build trust and engage stakeholders through CCS public outreach and education.
- Accelerate CCS in developing countries by funding storage appraisals and technology readiness assessments.
- Promote the value of CCS in achieving domestic energy goals and global climate goals.
- Incentivize investments in CCS by developing and implementing policy frameworks.
- Implement legal and regulatory frameworks for CCS.

Ad Hoc Committee White Paper

- It is proposed that gaining greater understanding of what usage is currently taking place, the Technical and Policy Groups will be better poised to disseminate CCUS messaging [and define future work] to multiple stakeholders, from technical to ministerial engagement. The Ad Hoc Committee will focus on four main areas of examination:
 - 1. Task Force utilization analysis
 - 2. TRM Recommendation analysis and creation of baseline for future tracking
 - 3. Knowledge sharing recommendations for dissemination
 - Potential alignment of Task Forces (Academic, Communication, other) with Technical and Policy Group activities within CSLF, and also with allied organizations (IEAGHG, CCS Knowledge Center, CO2 GeoNet) and platforms (Mission Innovation, CEM, ACT)

Approach

- Conducted survey summer/fall 2018 of delegates to gather details:
 - How TRM and Task Force reports being used
 - Who using
 - Establish baseline for understanding TRM monitoring
- Download statistics for TRM [as of today]



- Gathered useful information in some areas
- More work needed
- Indication of directions [discussion]

- Majority of respondents have read and used TRM
- Task force reports have shifted in nature
 - Older reports focused on knowledge sharing
 - Newer reports focused on RD&D strategy
- Since $2016 2^{nd}$ most downloaded document (after CSLF charter), excluding meeting documents, n = 272, by 193 different users

TRM Usage

Asked the Question - How have, if at all, the CSLF TRMs 2013 and 2017 been used in your national CCUS strategies or in the formulation of national RD&D programs?

- 12 out of 14 respondents used TRM in the formation of national RD&D CCS strategies.
- Types of usage include:
 - Used to define important topics
 - National CCUS Strategies and Reports (Canada, China, US NPC CCUS Study)
 - RD&D strategies and proposal

Task Force Report Information

- Most widely used reports (in order of highest use reported):
 - 1. Task Force on Supporting Development of 2nd and 3rd Generation Carbon Capture Technologies: Final Report (December 2015)
 - 2. Task Force on Hydrogen Production and CCS: Results and Recommendations from "Phase 0" (June 2018)
 - Task Force on Technical Barriers and Research and Development Opportunities for Offshore, Sub-Seabed Storage of Carbon Dioxide (CO2): Final Report (September 2015)
 - 4. Task Force on Offshore Carbon Dioxide Enhanced Oil Recovery (CO2-EOR): Final Report (November 2017)
 - Task Force on Technical Challenges of Conversion of CO2-EOR Projects to CO2 Storage Projects: Final Report (September 2013)

Task Force Report Information

- Reports most often used for
 - Knowledge and Technical Gain
 - RD&D Program Planning
 - Developing Standards (ISO TC 265)
- Reports also used for Technology Assessment, Strategic Planning, and Proposal Development
- More than 50% of respondents reported that TF reports have been utilized in decision-making, policy-making or knowledge sharing forums.

Future Work Discussion

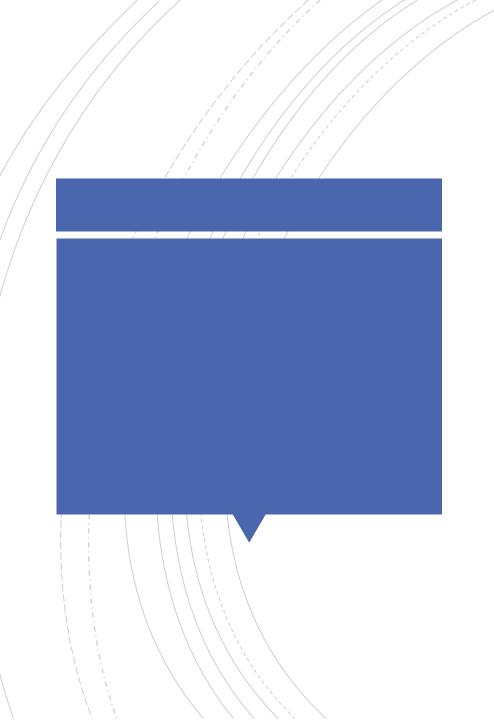
- Suggested Future work for Technical Group Task Forces:
 - Hub Infrastructure
 - Support Developing Countries [connect with Capacity Building Task Force]
 - Cost-effective Capture Technology
 - More clarity on economic benefits of low-carbon policy
 - Interfacing with Policy Group
 - Technical inputs into business model discussion
 - Technical inputs into socio-economic benefits
- Technology Recommendations/Task Force/Workshop model
 - Task Force and partner organizations conduct workshops on technical recommendations
 - Create proceedings reports
 - Disseminate to technical and policy stakeholders using strategic approach tailored to audience
 - Focus on Key

Future Work Discussion

 Still need methods for tracking TRM technology recommendations

- Knowledge Sharing how measure benefits
- Align with partner organizations to maximize impact and decrease overlap
- Mechanisms for wider distribution of TRM (beyond delegates)
- Mechanisms for engaging CSLF countries in monitoring, messaging, and dissemination





- 21 respondents from at least 10 countries (Australia, Canada, China, Czech Republic, Japan, Norway, Romania, South Korea, United Kingdom, United States)
- Self-identified:
 - 13 delegates
 - 4 observers
 - 4 no identification of role
- Additional CCUS Forum Participation:
 - CEM 12 respondents
 - Mission Innovation 14 respondents
 - ACT 7 respondents