

# Messages and Recommendations from the CSLF Technical Group

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**Technical Group Chairman** 



## Key Technical Group Program driver

Ministerial Communiqué of 2013 from the 5<sup>th</sup> CSLF Ministerial noted:

"The Ministers also stressed that the next seven years are critically important for creating the conditions for CCS to be ready for large-scale deployment by the end of the decade."

Two years later, barriers are still in place that inhibit the accomplishment of this goal.



## Actions and response of TG

TG developed a Technology Roadmap Interim Report to assess technology readiness and current progress towards commercial implementation

What are the key factors affecting implementation: Technology, Policy, Economics?



## General observations from interim report

- 1<sup>st</sup> generation technology is ready.
- Barriers are economic and policy-related. Creates uncertainty for investment decisions not just for demos but R&D as well.
- 2<sup>nd</sup> generation technologies will drive down costs, increase reliability and operational performance.
- Operational scale remains an issue 1GT by 2030 is required

#### Slide 4

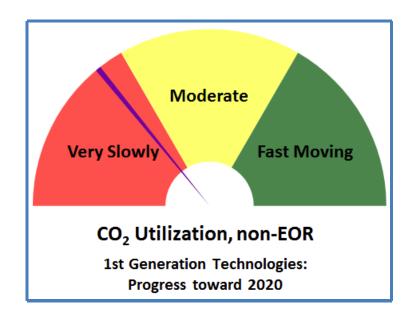
### **AM1** This should be referenced.

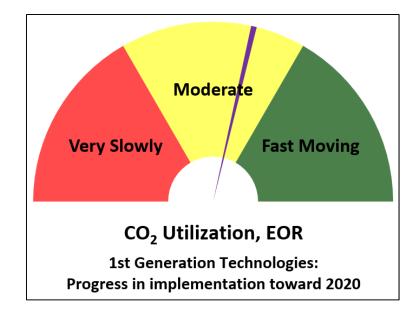
Ackiewicz, Mark, 10/22/2015

## Progress of technology needs



'Slow to moderate' progress toward implementation was perceived, in general, mainly because of existing policy and economic barriers.







## Recommendations from interim report

- <u>Technology:</u> Share best practices, encourage publicprivate partnerships, and <u>need more demonstration</u> <u>projects!</u>
- **Economics:** Need to work with stakeholders to drive down costs; government plays a critical role in incentivizing early projects.
- Policy: Needs to mature to meet goals and address barriers. Regulatory and policy frameworks must be in place.



### **Recommended Actions**

- <u>CO<sub>2</sub> Utilization</u>: For enhanced oil recovery (EOR): clarify policies and regulatory frameworks. Non-EOR options: Technical development and analyses to understand potential.
- Offshore Sub-Seabed Storage: Need to evaluate and assess capacity. Financial incentives to speed development.
  Knowledge-sharing.
- <u>Reduce Cost of CO<sub>2</sub> Capture</u>: Continue and sustain support, particularly pilot and demos. Continuity is critical.
- <u>Emerging Economies</u>: Engage in technical capacity building. This is a necessary precursor for large-scale CCS.

## Technical Group Documents for 6th CSLF Ministerial Conference

- Technology Roadmap (TRM) Interim Report
- Report on Development of 2<sup>nd</sup> and 3<sup>rd</sup> Generation CO<sub>2</sub> Capture Technologies
- Key Messages from the CSLF "Lessons Learned from Large-Scale CCS" Workshop
- Messages and Recommendations from CSLF Technical Group





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