



The Next CSLF Technology Roadmap (TRM)

Lars Ingolf Eide, Norway

CSLF Technical Group Delegate Virtual Meeting

Hosted by the Kingdom of Saudi Arabia

September 30, 2020

Why a Technology Roadmap (TRM)?

- A TRM will contribute to a common understanding among CSLF and CEM CCUS (and Missions Innovation IC3?) members of:
 - The role of CCUS in decarbonizing society
 - The status of CCUS
 - Important and necessary developments to speed up implementation of CCUS
- A TRM will
 - Reach the wide membership of CSLF
 - Help countries developing national strategies on CCUS
 - Be an important tool in communicating the need and role of CCUS

Why update the 2017 CSLF TRM now?

- We are not on track to achieve targets from 2017 TRM
- Several new important reports, some with new scenarios, since 2017, including IPCC 1.5 °C, IEA Energy Technology Perspective 2020, IEA ETP Special Report on CCUS, World Energy Outlook
 - May need to re-visit targets
- The interest in CCUS has shifted from pure technology development to integration and utilisation issues

Possible content of the TRM revision

- Summary and recommendations (Targets may have to be revisited due new scenarios and reports, e.g. IEA ETP 2020 and IEA Special report on CCUS)
- Introduction (much as in 2017 TRM)
- Brief summary of the role of CCUS (e.g. from new scenarios)
- Brief status of CCUS
- Sections on issues (some touched upon in 2017 TRM but need strengthening)
 - Hydrogen and CCUS (blue hydrogen)
 - CCUS for industrial clusters and needed transport and storage infrastructure
 - Utilisation options, including techno-economic-environmental assessments
 - Negative emissions, including Direct Air Capture (DAC) and bio-energy w/CCUS (BECCS) and techno-economic-environmental assessments
 - Emerging and enabling technologies (robotis/autonomus systems, manufacturing, digital, VR/AR, sensors, manufacturing, materials)

Sources and organisation



- 2021 TRM will, as earlier versions, be based on existing knowledge
- Sources
 - The referenced new reports slide 3
 - Relevant national CCUS strategies
 - Other input from members
 - **WE WILL BE ASKING FOR VOLUNTEERS FOR SECTIONS**
 - Published papers, grey literature, webinars, web sites, etc
- Organisation:
 - Editorial committee: CSLF ExCo
 - Chief editor: Norway

Timeline



- 1st list of content : 30 October 2020
- 2nd list of content: 20 November 2020
 - Assign responsibilities
- 1st draft: 12 March 2021
- 2nd draft. 26 March 2021
- Final: 16 April 2021, for Clean Energy Ministerial