



International Panel Session

*The 8th International Supercritical CO₂ Power Cycles Symposium
San Antonio, Tx*

Need to derisk the technology

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International Panel Session

8th Supercritical CO₂ Power Cycle Symposium, San Antonio TX

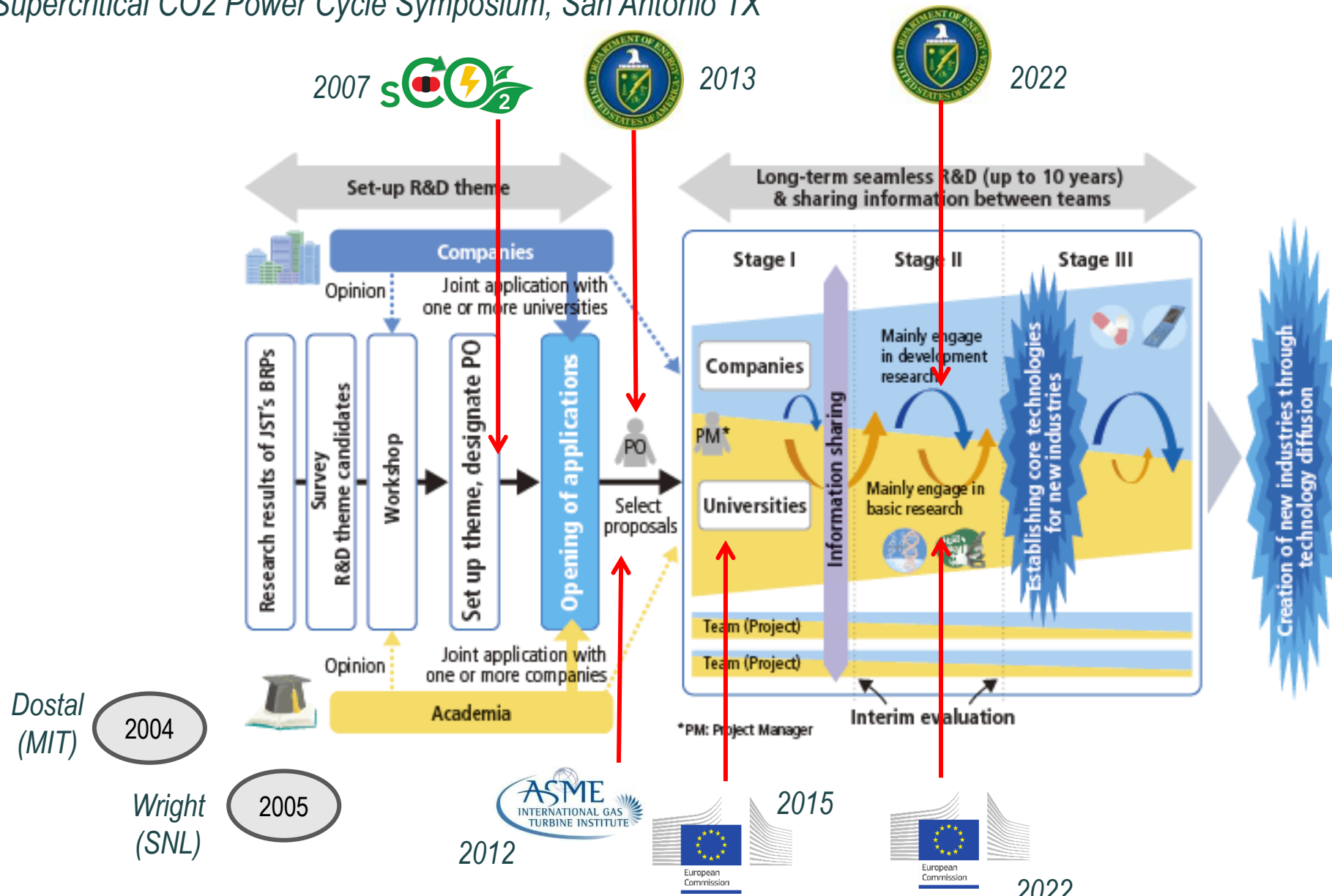
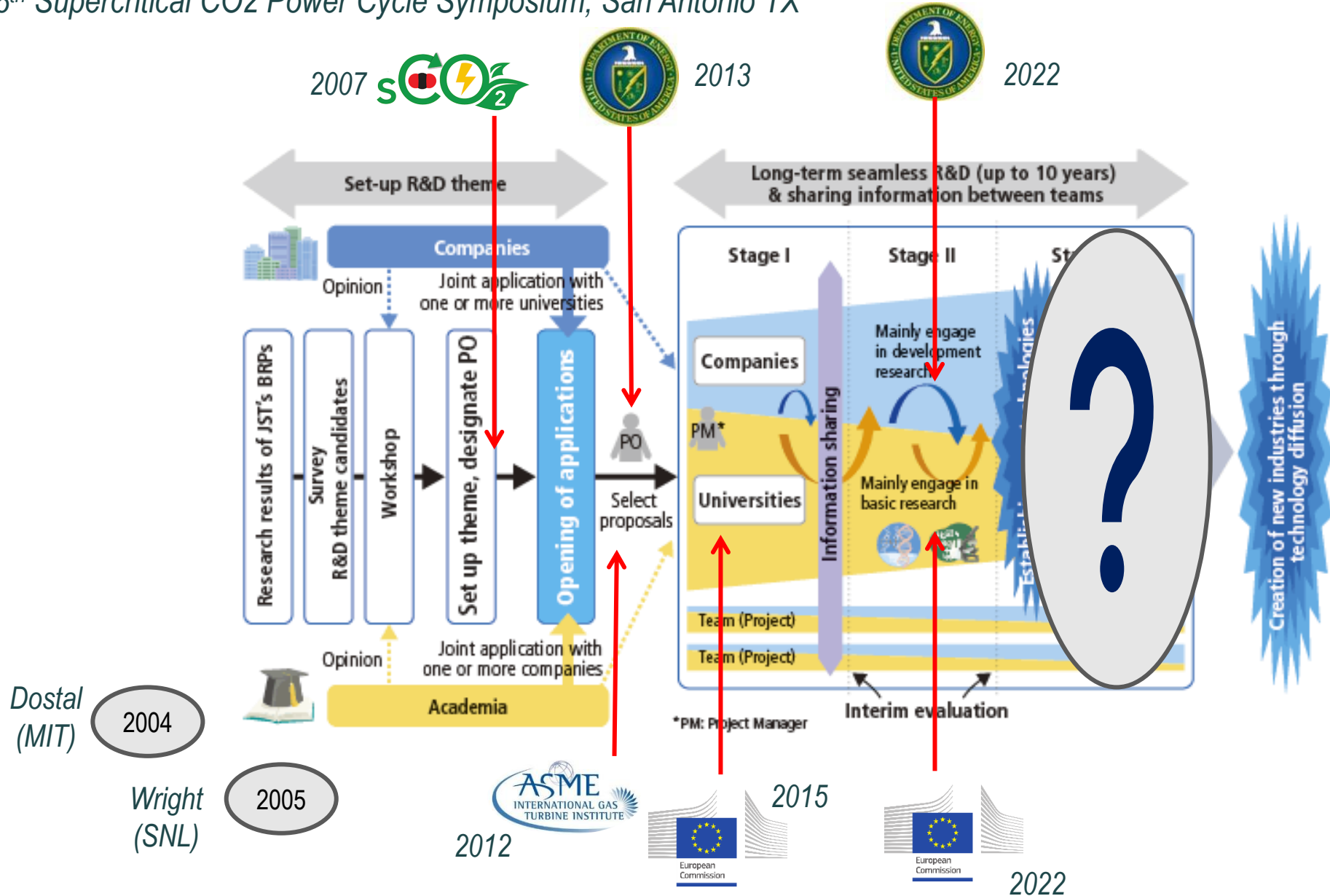


Figure credits: Industry-Academia Collaborative R&D Programs, Japan Science & Technology Agency



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Getting to stage 3?

Need to derisk through demonstration

Figure credits: Industry-Academia Collaborative R&D Programs, Japan Science & Technology Agency

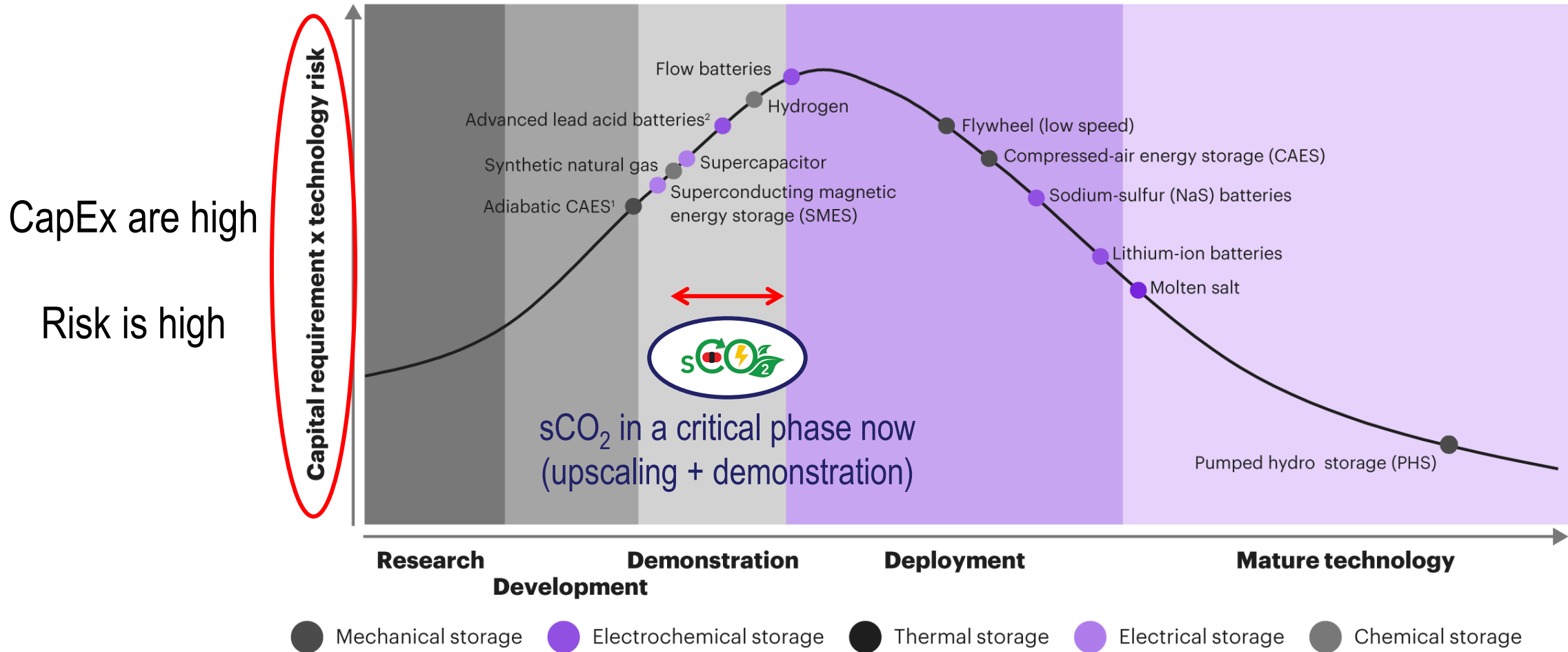


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Technology maturity curve



¹ CAES is compressed-air energy storage.

² Valve regulated lead acid batteries is a mature technology.

Source: A.T. Kearney Energy Transition Institute analysis

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CANCELLED



GT+sCO₂
7.5 MWe

CO₂OLHEAT Cement+sCO₂
2 MWe



CANCELLED



CSP+sCO₂
10 MWe



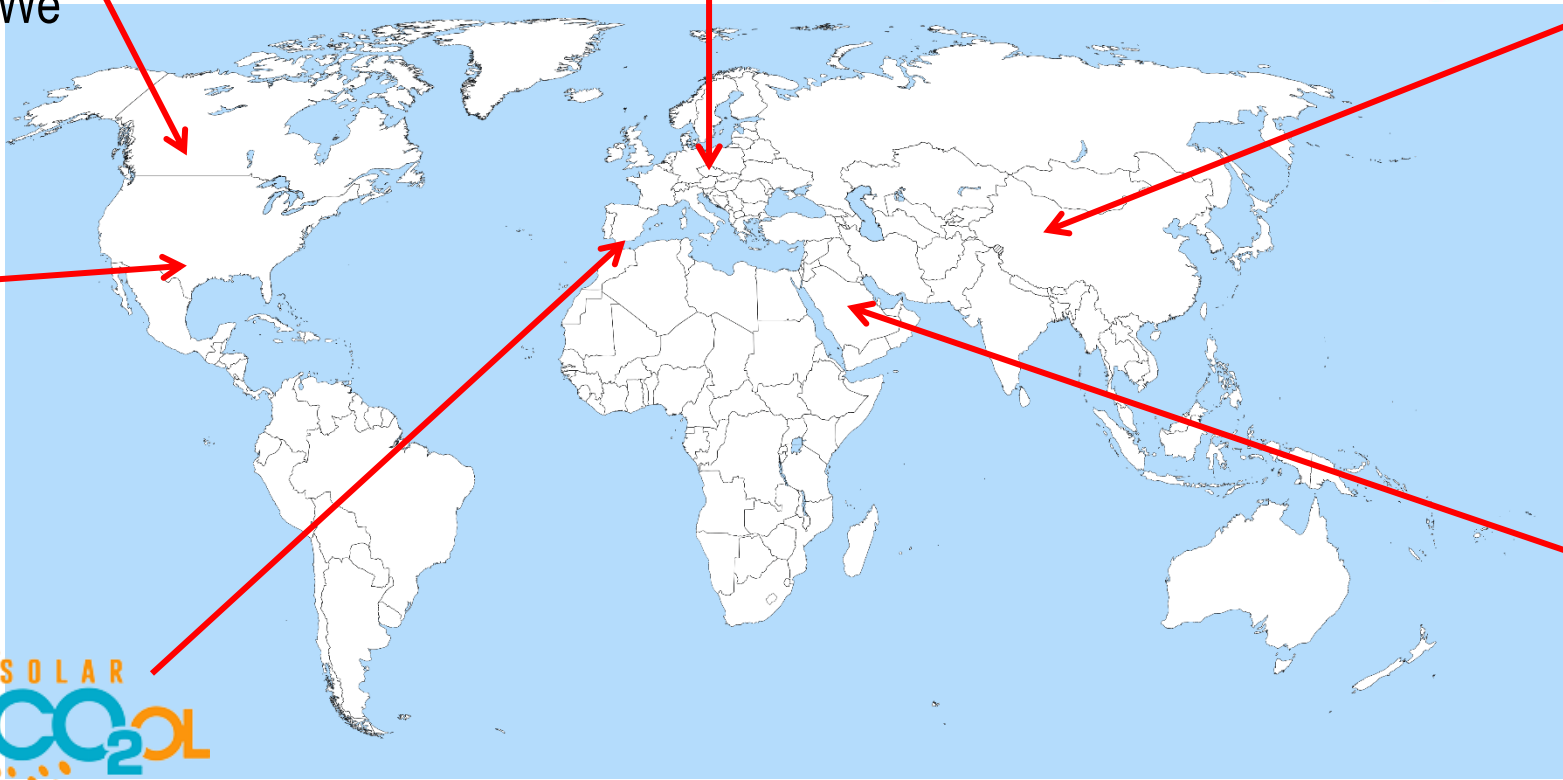
NG+sCO₂
10 MWe



DESOLINATION
CSP-D+sCO₂
10 MWe



CSP+sCO₂
2 MWe



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- Early-adopters still reluctant:
 - High costs of ongoing projects → Uncertain CapEx
 - Operational demonstration (at relevant scale) still missing → Uncertain OpEx
- Upscaling and demonstration (operational) mandatory to derisk technology
- Is this possible today?
 - Availability of R&D funding
 - Suitability of current R&D programmes
 - Engagement of industry sponsors

University R&D Panel Session

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Thank you!

