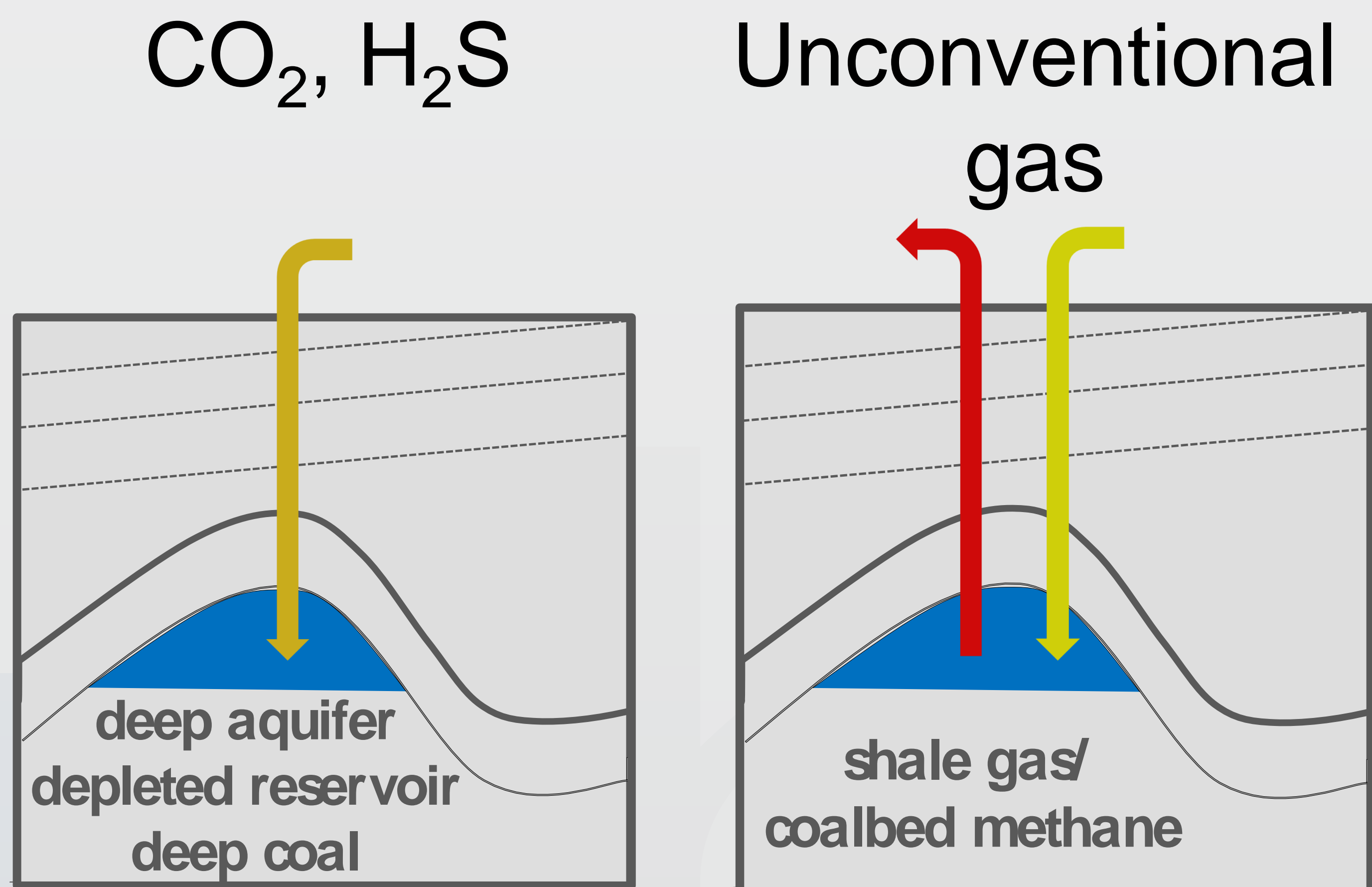
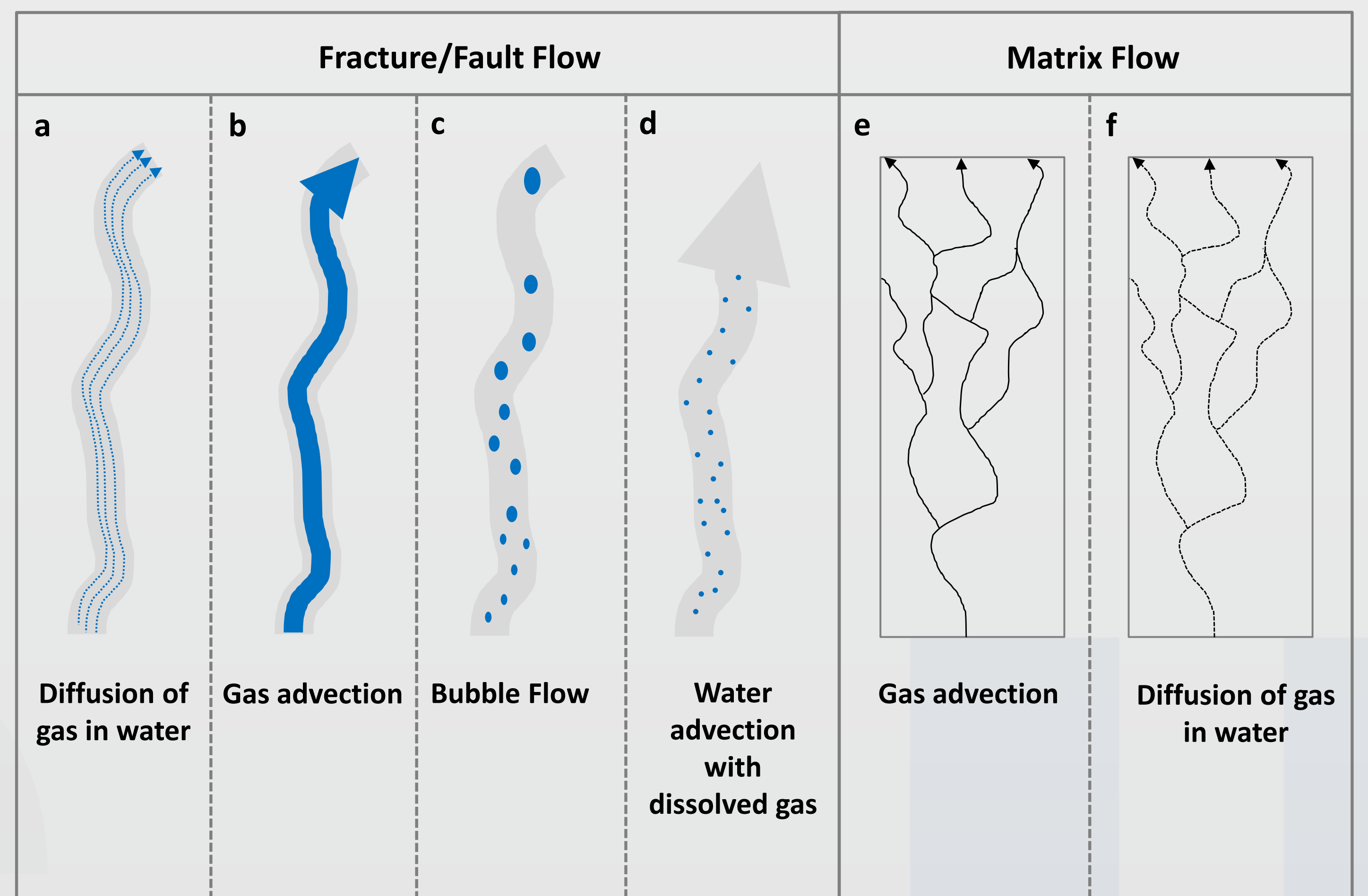


Potentials and risks associated with CO₂ storage and unconventional gas production

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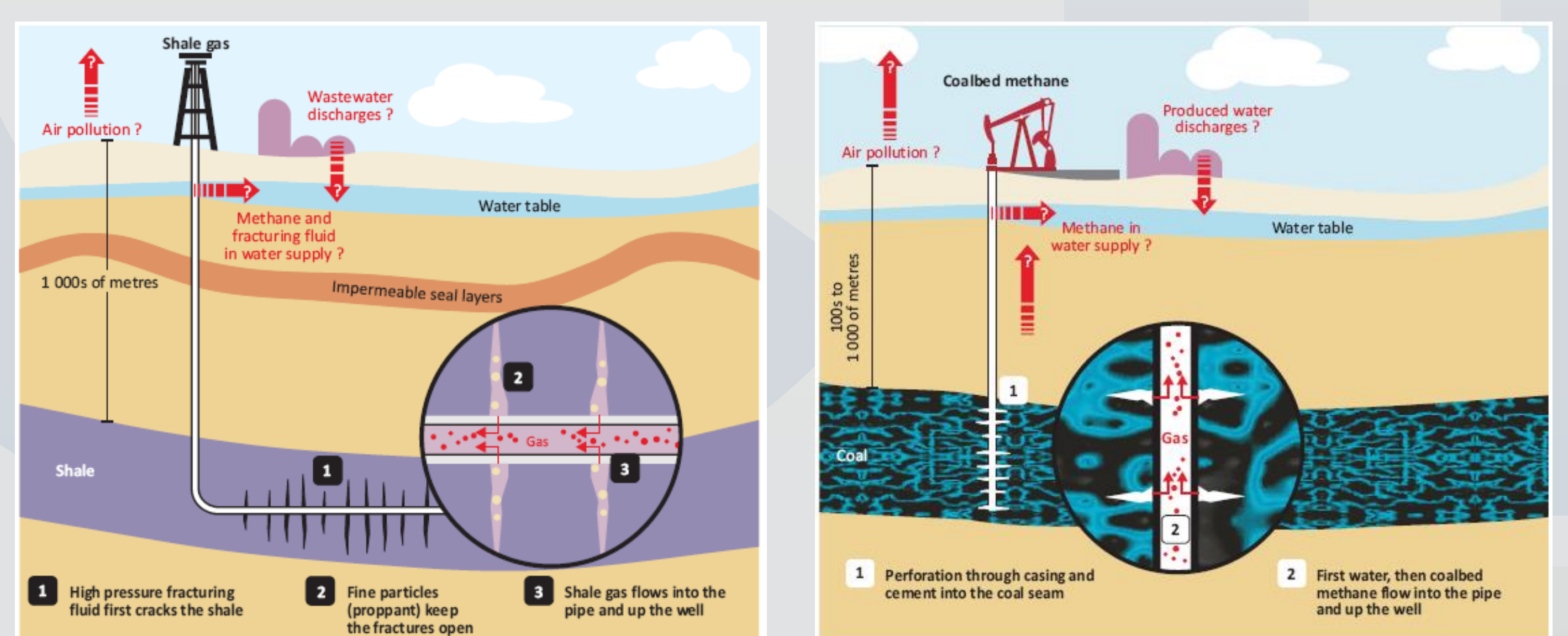


- Key future-challenges will be to limit our carbon footprint to the atmosphere, at the same time increasing the production of cleaner hydro-carbons, such as unconventional gas from shale and coal.
- We are developing workflows for safe and permanent carbon storage into deep saline formations or depleted reservoirs and investigate the coupled hydro-chemical-mechanical processes taking place over different time scales.



Flow in the subsurface (Busch & Kampman, 2016)

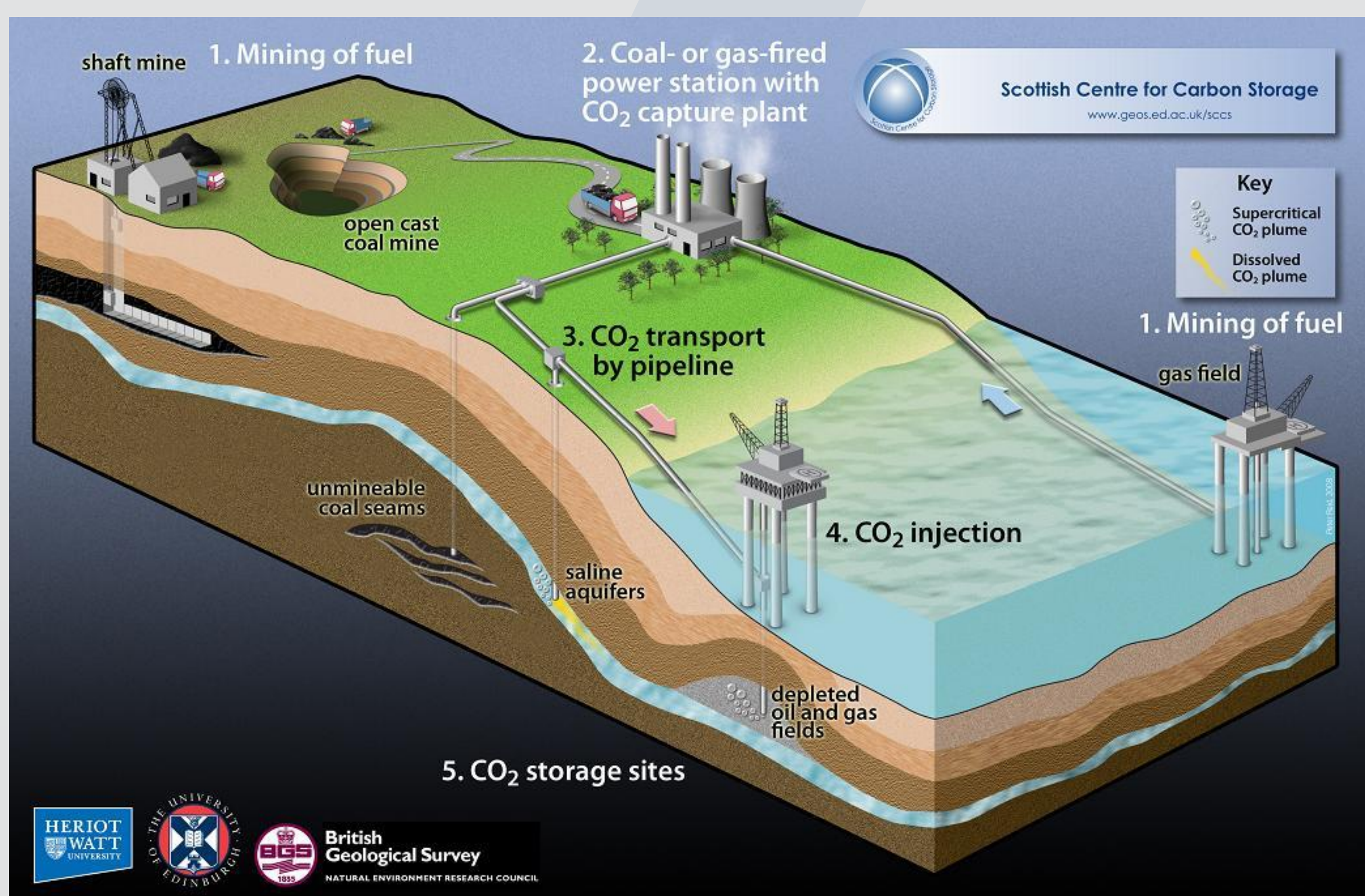
We investigate the potential for sweet spot identification and the risks of producing gas from unconventional reservoirs having the potential to provide additional energy security for the UK and worldwide



Unconventional shale (left) and coalbed (right) reservoirs (Aldhous, 2012)

This work will be integrated into the ongoing work at IPE, the Scottish CCS Centre and BGS as well as together with various academic and industrial partners.

Aldhous, 2012. New Scientist 2849, 8-10.
Busch, Kampman, (2016). in Vialle & Ajo-Franklin. AGU book



Carbon Capture, Transport and Storage