

Timescales for CO₂ Storage: How Long is Long Enough?

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How long should stored CO₂ remain underground? This is a central question in managing the geological storage for which there is no unique answer. Using simple economic arguments and models I will demonstrate how the answer turns on important assumptions including, (i) the acceptable concentration of CO₂ in the atmosphere, (ii) the amount of CO₂ that will ultimately be stored, (iii) the existence of technologies that can remove CO₂ by enhancing natural carbon sinks or by engineering new kinds of sinks, and (iv) the weight given to small increases in CO₂ concentrations on millennial timescales.

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