

## **Woodhead book: Geological storage of CO<sub>2</sub>**

### **Chapter 4 title:** Monitoring geological storage of CO<sub>2</sub>

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**Chapter abstract:** The ultimate purpose of monitoring is to confirm safe and permanent storage of CO<sub>2</sub> in the reservoir. Other more specific monitoring objectives are also identified in this chapter. A selection of the technologies able to meet these objectives are described using examples from existing CO<sub>2</sub> storage sites. Each site will have different characteristics, so the most suitable combination of monitoring technologies will be site specific. Therefore possible methods to help devise suitable monitoring strategies are also suggested. Monitoring results can be used to validate site performance using temporal modelling and these can build confidence in long term predictions of safe storage.

**Keywords:** CO<sub>2</sub> storage site monitoring, monitoring technologies, monitoring programme, monitoring strategies, modelling CO<sub>2</sub> storage