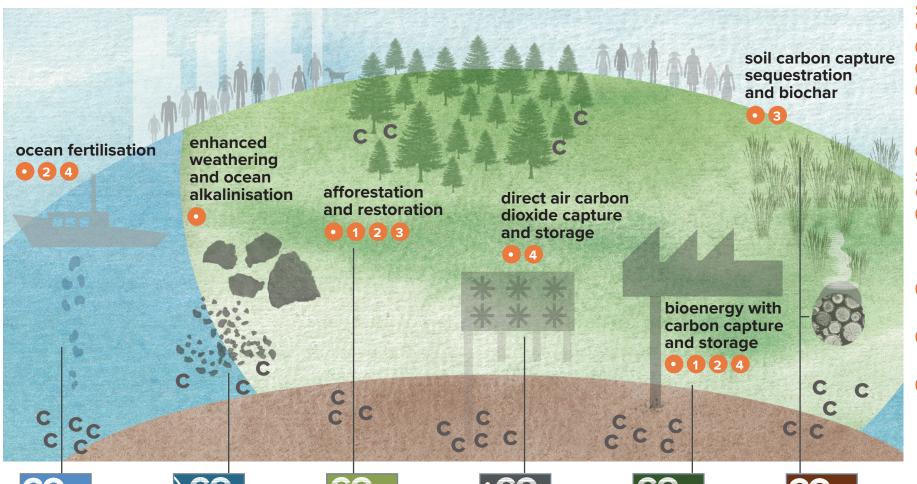
Governing Carbon Dioxide Removal



CO₂

Fertilising ocean ecosystems to accelerate phytoplankton growth, which partly sinks to transport carbon from atmosphere to seabed



Enhancing natural weathering of rocks by extracting, grinding, and dispersing carbon-binding minerals on land, or adding alkaline minerals to the ocean to increase carbon uptake



Planting forests and restoring ecosystems, for long-term carbon storage in above- and below-ground biomass



Using chemical process to capture CO₂ directly from ambient air; using or permanently storing the CO₂



Burning biomass for energy generation; capturing and permanently storing the resulting CO₂



Burning biomass under low-oxygen conditions, yielding charcoal "biochar" to add to soil and enhance soil carbon levels

Shared Governance Challenges include:

- Measurement and reporting;
- Speed/scale issues;
- Potential public concerns, including transparency of information, accountability, involvement in decisions;
- Liability and compensation.

Specific Governance Challenges include:

- 1 Managing the competition for land use and related impacts on the SDGs at domestic and transboundary levels;
- 2 Managing risks and potential implications for biodiversity;
- 3 Addressing permanence of CO₂ isolated from atmosphere;
- 4 High costs land use, capital, deployment, energy mean policy signals, e.g., price on carbon or other regulation, are needed.



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