Considerations for carbon storage via mineralization

Technical

- Tectonic setting and occurrence of mafic or ultramafic rock formations
- Proximity to water, electricity and a CO_2 source
- Natural hazards (e.g. earthquakes, wildfire, landslides)
- Viable areas (i.e. not permafrost, glaciers, lakes)
- Volume and depth of rock formation
- Geothermal gradient, geothermics, groundwater table and injection depth
- Accessibility to site
- Injectivity of rocks (porosity, permeability)
- Reactivity of rocks (mineralogy, alteration extent)

Socioeconomic

- Global climate change and effects on historically marginalized communities
- Provincial and federal policy, permitting, and financial incentives with climate goals
- Socioeconomic history of area (e.g. colonization, pollution, relations with industry)
- Land tenure and mineral claims
- Relations with the land/rocks
- Other stakeholders' views, plans and relations
- First Nations' relations with province, universities, industry etc.
- Relationships between researcher and First Nations
- Opinions and views of individuals from local communities