

**Supplementary Information for:**  
**Techno-economic Assessment for Bio-accelerated  
Weathering for Carbon Sequestration**

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## **Supplementary Information Tables**

**Table S1.** Weight percent of elements within ultramafic rocks.

**Table S2.** Definition of technology readiness levels.

## Supplementary Tables

<b>Element</b>	<b>Weight Percent of Metal Within Rock Tailings</b>
Mg	26.54
Si	20.91
Fe	6.270
Ca	0.8925
Al	0.6779
Ni	0.2184
Mn	0.1031
Cr	0.06927
Na	0.06658
K	0.05279
Ti	0.02329
P	0.01217
Co	0.01121

**Table S1. Weight percent of elements within ultramafic rocks. Metal concentrations were calculated by averaging** values from four of the world's largest and most accessible ultramafic rock formations: the Oman Peridotite [Hanghoj2010a], Josephine Ophiolite [LeRoux2014a], Abyssal Peridotite [Niu2004a], and Cratonic Peridotite [Wittig2008a] formations.

<b>TRL</b>	<b>Description</b>
1	Basic principles observed
2	Technology concept formulated
3	Experimental proof of concept
4	Validation in laboratory
5	Validation in relevant environment
6	Demonstration in a relevant environment
7	Demonstration in an operational environment
8	System complete and qualified
9	Actual system proven in operational environment

**Table S2. Definition of technology readiness levels.** Reproduced from [Horizon2014a].

## Supplementary References

- [Hanghoj2010a] K. Hanghøj, P. B. Kelemen, D. Hassler, and M. Godard, “Composition and Genesis of Depleted Mantle Peridotites from the Wadi Tayin Massif, Oman Ophiolite; Major and Trace Element Geochemistry, and Os Isotope and PGE Systematics”. *Journal of Petrology* **51**, 201-227 (2010). doi:10.1093/petrology/egp077.
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