IDENTIFYING INFORMATION:

NAME: Miller, Sabbie

ORCID iD: https://orcid.org/0000-0001-6888-7312

POSITION TITLE: Associate Professor, Department of Civil & Environmental Engineering

PRIMARY ORGANIZATION AND LOCATION: University of California, Davis, Davis, CA, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
University of California Berkeley, Berkeley, California, United States	Postdoctoral Fellow	07/2014 - 06/2016	Civil & Environmental Engineering
Stanford University, Stanford, California, United States	PHD	06/2014	Civil & Environmental Engineering
Stanford University, Stanford, California, United States	MS	09/2010	Civil & Environmental Engineering
Washington University in St. Louis, St. Louis, Missouri, United States	BS	08/2008	Civil Engineering

Appointments and Positions

2022 - present Associate Professor, Department of Civil & Environmental Engineering, University of California, Davis, Davis, CA, United States

2022 - present Faculty Scientist, Energy Analysis & Environmental Impacts Division, Energy Technologies Area, Lawrence Berkeley National Laboratory, Berkeley, CA, United States

2016 - 2022 Assistant Professor, Department of Civil & Environmental Engineering, University of California, Davis, Davis, CA, United States

2014 - 2016 Postdoctoral Fellow, Department of Civil & Environmental Engineering, University of California Berkeley, Berkeley, CA, United States

Products

Products Most Closely Related to the Proposed Project

1. Miller S. The role of cement service-life on the efficient use of resources. Environmental Research Letters. 2020 January 20; 15(2):024004-. Available from: https://iopscience.iop.org/article/10.1088/1748-9326/ab639d DOI: 10.1088/1748-9326/ab639d
2. Kim A, Cunningham P, Kamau-Devers K, Miller S. OpenConcrete: a tool for estimating the environmental impacts from concrete production. Environmental Research: Infrastructure and Sustainability. 2022 October 04; 2(4):041001-. Available from: https://iopscience.iop.org/article/10.1088/2634-4505/ac8a6d DOI: 10.1088/2634-4505/ac8a6d

3. Van Roijen E, Miller S. A review of bioplastics at end-of-life: Linking experimental biodegradation studies and life cycle impact assessments. Resources, Conservation and Recycling. 2022 June; 181:106236-. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0921344922000842 DOI: 10.1016/j.resconrec.2022.106236
4. Cunningham P, Miller S. A material flow analysis of carpet in the United States: Where should the carpet go?. Journal of Cleaner Production. 2022 September; 368:133243-. Available from: https://linkinghub.elsevier.com/retrieve/pii/S095965262202830X DOI: 10.1016/j.jclepro.2022.133243
5. Olsson J, Hafez H, Miller S, Scrivener K. Greenhouse Gas Emissions and Decarbonization Potential of Global Fired Clay Brick Production. Environmental Science & Technology. 2025 January 23; 59(4):1909-1920. Available from: https://pubs.acs.org/doi/10.1021/acs.est.4c08994 DOI: 10.1021/acs.est.4c08994

Other Significant Products, Whether or Not Related to the Proposed Project

1. Van Roijen E, Miller S, Davis S. Building materials could store more than 16 billion tonnes of CO_2 annually. Science. 2025 January 10; 387(6730):176-182. Available from: https://www.science.org/doi/10.1126/science.adq8594 DOI: 10.1126/science.adq8594
2. Van Roijen E, Sethares K, Kendall A, Miller S. The climate benefits from cement carbonation are being overestimated. Nature Communications. 2024 June 06; 15(1):-. Available from: https://www.nature.com/articles/s41467-024-48965-z DOI: 10.1038/s41467-024-48965-z
3. Miller S, Habert G, Myers R, Harvey J. Achieving net zero greenhouse gas emissions in the cement industry via value chain mitigation strategies. One Earth. 2021 October; 4(10):1398-1411. Available from: https://linkinghub.elsevier.com/retrieve/pii/S2590332221005339 DOI: 10.1016/j.oneear.2021.09.011
4. Miller S, Moore F. Climate and health damages from global concrete production. Nature Climate Change. 2020 March 23; 10(5):439-443. Available from: https://www.nature.com/articles/s41558-020-0733-0 DOI: 10.1038/s41558-020-0733-0
5. Shah I, Miller S, Jiang D, Myers R. Cement substitution with secondary materials can reduce annual global CO2 emissions by up to 1.3 gigatons. Nature Communications. 2022 September 30; 13(1):-. Available from: https://www.nature.com/articles/s41467-022-33289-7 DOI: 10.1038/s41467-022-33289-7

Certification:

I certify that the information provided is current, accurate, and complete. This includes but is not limited to information related to domestic and foreign appointments and positions.

I also certify that, at the time of submission, I am not a party to a malign foreign talent recruitment program.

Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Miller, Sabbie in SciENcv on 2025-04-20 16:06:12