## References

- 1. Friedlingstein et al. (2025) Global Carbon Budget 2025. Earth System Science Data. https://doi.org/10.5194/essd-2025-659
- 2. NASEM. A Research Strategy for Ocean-based Carbon Dioxide Removal and Sequestration. National Academies of Sciences, Engineering, and Medicine. Washington, D.C.: National Academies Press; 2022. https://doi.org/10.17226/26278
- 3. Oschlies et al. (2025). Perspectives and challenges of marine carbon dioxide removal. Frontiers in Climate, v6, 1506181. https://doi.org/10.3389/fclim.2024.1506181
- 4. Ward et al. (2024). OCDR technical readiness review Conceptual designs of OCDR approaches and descriptions of their system boundaries, key processes, material and energy flows and carbon balances used to review and summarise their technical readiness. SEAO2-CDR Deliverable D2.1. https://seao2-cdr.eu/results
- 5. Delval et al. (2024). A common LCA framework The considers a standardised template for inventory information, methods of setting boundary conditions, specifying functional units, scenarios of CO2 emissions intensity of energy, and methods of interpreting results. SEAO2-CDR Deliverable D2.3. https://seao2-cdr.eu/results
- 6. Delval et al (2025). Life cycle assessment of ocean-based carbon dioxide removal approaches: A systematic literature review. Renewable and Sustainable Energy Reviews. v224,116091. https://doi.org/10.1016/j.rser.2025.116091
- 7. Ward et al. (2025), Techno-economic analysis of ocean iron fertilization, Frontiers in Climate v7, 1509367, https://doi.org/10.3389/fclim.2025.1509367
- 8. Schaap et al (2025). Autonomous sensor for in situ measurements of total alkalinity in the ocean. ACS Sensors, v10, p795-803. https://doi.org/10.1021/acssensors.4c02349