

Preface

Carbon dioxide removal (CDR) is a process in which carbon dioxide (CO₂) is removed from Earth's atmosphere by deliberate human activities and durably stored in geological, terrestrial, or marine reservoirs, or in products. This process is also known as carbon removal, greenhouse gas removal or negative emissions. CDR is more and more often integrated into climate policy, as an element of climate change mitigation strategies. Achieving net zero emissions will require first and foremost deep and sustained cuts in emissions, and then—in addition—the use of CDR ("CDR is what puts the net into net zero emissions"). In the future, CDR may be able to counterbalance emissions that are technically difficult to eliminate, such as some agricultural and industrial emissions.¹

In the present book, ten typical literatures about carbon-negative materials published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on carbon-negative materials. We hope this book can demonstrate advances in carbon-negative materials as well as give references to the researchers, students and other related people.

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¹ https://en.wikipedia.org/wiki/Carbon_dioxide_removal