



## Recent Developments in Carbon Emissions Reduction Approaches

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Deadline for manuscript  
submissions:

**closed (10 June 2024)**

### Message from the Guest Editors

Dear Colleagues,

Human activities have increased the amount of carbon dioxide in the atmosphere by 50% in less than 200 years. Pollution caused by carbon dioxide, causes serious environmental challenges for humanity. Hence, many countries around the world have employed the target of net-zero carbon emissions for the next few decades in an attempt to mitigate global warming. Various options have been proposed to reduce carbon emissions.

In recognition of the net-zero target, the open access journal *Atmosphere* is hosting a Special Issue to showcase the most recent findings related to recent developments in carbon emissions reduction approaches. In this Special Issue, we welcome experimental, theoretical, and simulation investigations to enhance the development of environmentally friendly methods relevant to carbon emissions reduction. The areas of focus include, but are not limited to, the following: the geological storage of carbon dioxide; carbon dioxide enhanced oil/gas recovery; new materials for carbon capture; carbon utilization; techniques for renewable energy resources; underground hydrogen storage; fuel cell; and reversible solid oxide cell.





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## Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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