



## Future of Clean Energy: Prospects of Nuclear Fusion

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### Message from the Guest Editors

The development of practical fusion reactors would have a profound impact on global energy systems, potentially helping to reduce greenhouse gas emissions, air pollution, and dependence on fossil fuels. It would also increase energy security by reducing the need for imports of fuel from unstable regions. Despite the potential benefits, there are still significant technical challenges to overcome before fusion can be commercialized. Currently, in order to realize the safe future fusion reactor, there is a need to develop the engineering technology, including the fuel breeding system and the control system that encompasses them, to sustain the burning plasma.

The aim of this Special Issue is to shed light on new research in nuclear fusion, as it has the potential to be a game-changer in the world of energy production, offering a clean, safe, and nearly unlimited source of power. The development of fusion technology is an important step towards a more sustainable energy future and a crucial component of efforts to address climate change.





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