



## Forest Biomass Utilization: Implications for Global Sustainable Development

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### Message from the Guest Editor

Forest biomass utilization has significant implications for global sustainable development across environmental, economic, and social dimensions. Utilizing forest biomass sustainably presents both opportunities and challenges in the transition towards renewable and low-carbon energy sources. From an environmental perspective, responsible forest biomass utilization can contribute to mitigating climate change by substituting fossil fuels with biomass-derived energy, and/or using mass timber products as carbon sequestrers. Economically, forest biomass utilization creates jobs in the forestry, processing, and bioenergy sectors. On a social level, biomass utilization can enhance energy security and access, particularly in rural and remote areas where conventional sources may be limited. The main challenges include ensuring biomass extraction does not exceed forest regeneration rates, protecting biodiversity, and addressing land-use conflicts. This Special Issue aims to provide an overview of the most recent advances in the field of forest biomass and their applications in diverse areas, keeping in mind the concept of global sustainable development.





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