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## The Assessment of Forest Wood Biomass Potential in Terms of Sustainable Development

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Abstract: The role of sustainable biomass, including wood biomass, is becoming more important because of European Green Deal. The New EU Forest strategy is a flagship element of the European Green Deal and a key action on the EU biodiversity strategy for 2030. The first measure of this strategy is promoting sustainable forest management, including encouraging the sustainable use of wood-based resources. The first aim of this research was to develop and present a new approach to the concept of forest wood biomass potential in terms of sustainable development, distinguishing theoretical, technical and sustainable potential and detailing its constraints. The second aim was to prepare the methodology outline of sustainable forest wood biomass potential assessment and empirically check this methodology, considering economic, social and ecological constraints. The basic methodologies of the research: the review of research (with a combination of semi-systematic and integrative review methodologies), rapid assessment method and statistical data analysis. The developed methodology of assessment of forest wood potential in terms of sustainable development can be used in Lithuania and in other countries and will let us compare this potential a different time and spatial levels. The application of the methodology will be able to serve the development of new national strategies for the wood sector.

**Keywords:** assessment, constraints, forest wood biomass, methodology, potential, sustainability **Conference Title:** ICFES 2023: International Conference on Forest Ecology and Sustainability

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