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Presentations	Session 7.1	<i>'Sustainable forest management' in the context of global bioeconomy discourse and contemporary forest governance trends.</i>

*Abstract Session 7.1 – Assessing sustainability and value creation of young forest improvement thinning's methods: A participatory multi-criteria analysis approach.*

Small-diameter trees are a relevant forest resource in most European countries, with the potential to contribute to a sustainable forest-based bioeconomy. As many of the previous studies in the field of young dense forest stands management is mainly focusing on improving the productivity, there is need for research that investigates new ways of value creation in young stand improvement thinning's for different forest stakeholders whiles providing information of different processes overall sustainability. The present study aims to build an analytical multi-criteria framework with an intent providing a comprehensive picture of sustainability impacts and value creation effects of selected new promising small-diameter trees harvesting and extraction innovations, with using participatory process collecting and valuing a combination of quantitative and qualitative data regarding economic, social, and environmental aspects. This presentation will focus on examining and discussing the critical aspects of the framework formulation and sustainability perceptions around small-diameter wood harvesting and its end use. These could be identified as: i) remaining uncertainty and lack of knowledge of alternative carbon-efficient and long-lived wood products biomass uses of small-diameter material, ii) addressing the notion of strong sustainability, including issues with biodiversity preservation in young forests improvement thinning's; ii) issues of intensive forest management prospects of reaching broader conceptualisation of sustainability with part optimising just one of the forest management stages like small-diameter tree harvesting in early thinning's; iii) need for composing comprehension of the researchers selection procedures for key stakeholders as a determinant for whose bioeconomy sustainability concept is been strengthened and moreover the awareness of possible risk of politization in this kind of research.

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