indústria. Contudo, o processo produtivo dos materiais de madeira impacta o meio-ambiente. Neste sentido, a Avaliação do Ciclo de Vida (ACV) possibilita a avaliação de impactos ambientais potenciais associados ao WF, que passou a ter maior aplicação no Brasil a partir de 2011. Por meio de uma análise bibliométrica e bibliográfica, esta pesquisa investigou o progresso dos estudos de ACV relacionados ao WF e produtos de madeira relacionados a sua cadeia. As bases de dados utilizadas foram ProQuest, EBSCO, Scopus, Web of Science e Engineering Village, entre 2002 e 2018. Após o levantamento e seleção dos estudos, foram realizadas análises temporal e espacial e dos tipos de ACV construídas. As análises foram conduzidas em cinco eixos temáticos: Operações Florestais; Materiais de Madeira; Edificações em WF; Comparação de Sistemas Construtivos; e Revisão de Literatura. As publicações concentram-se nos últimos 5 anos, com destaque para 2018. A Europa e a América do Norte lideram as pesquisas no tema, representando 50 e 40% respectivamente. Foi possível estabelecer um framework do tema e sua evolução, com identificação de lacunas científicas para que sirvam como pontos norteadores de estudos do WF na construção civil brasileira.

Inclusión de defectos en la madera estructural como elemento estratégico en la gestión sostenible de los bosques tropicales

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Una premisa de la madera estructural es la eliminación de los defectos naturales de los árboles. Desde nudos hasta pudriciones, han sido considerados como obstáculos en el desempeño estructural, sin ninguna discriminación. Tal situación, trae como consecuencia grandes volúmenes desperdiciados y/o productos de menor valor económico que no alcanzan a cubrir sus costos de producción, incidiendo negativamente en la gestión forestal sostenible (GFS), pues solo el 5 a 20% de los árboles se convierte en producto final. En vista que la madera para construcción civil correctamente especificada y con propiedades mecánicas definidas, se cotiza mejor en los mercados, esta publicación tiene como objetivo presentar los resultados de la inclusión sistemática de defectos en madera laminada encolada (GLULAM) de gran formato con fines estructurales, elaborada con una especie de alta abundancia en el bosque muy húmedo del Litoral Pacífico colombiano, Campnosperma panamense Standl. Siete vigas GLULAM de 7500x500x50 mm fueron elaboradas; tres siguiendo estándares tradicionales de fabricación sin defectos y cuatro con defectos no aceptados para estos productos, los defectos fueron predefinidos y localizados estratégicamente. Se registraron todas las variables del proceso productivo. Como resultados se mejoró el aprovechamiento en madera con defectos y no se encontraron diferencias significativas entre los valores de resistencia a flexión para la madera con defectos y sin defectos. Se abre la posibilidad de hacer menos estricta la clasificación para reducir el desperdicio de material, contribuyendo a los objetivos de GFS, al procurar menor cantidad de árboles y el uso integral de los mismos.

C9d: SOCIETAL PERCEPTIONS, NEW PRODUCTS, MARKETS , AND BUSINESS MODELS OF THE CIRCULAR FOREST BIOECONOMY

Perceiving the Forest-based Bioeconomy (PerForm)

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In this presentation I will talk about the PerFormproject- a European cooperation network of social scientists investigating societal perceptions of the forest-based Bioeconomy. The aim of the projectis to better understand regional disparities of national bioeconomy policies and the perceptions of a forest-based bioeconomy. We explore the diversity of perceptions and acceptance of a forest-based bioeconomy in Europe in order to foster participation of different forest stakeholders and the broader public through an informed and open dialogue. We analyze perceptions of various stakeholder groups across Europe (Germany, Austria, Slovakia, France, Italy, Sweden, Finland). Methodologically, we build extensively on qualitative document analysis, stakeholder interviews and innovative communication tools.

Bioeconomy perception by future stakeholders: hearing from European forestry students

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The forest sector plays a pivotal role within the European bioeconomy and forestry students should be regarded as key-future stakeholders for the development of a forest-based bioeconomy. Nonetheless, while a number of studies have been conducted on public perception of bioeconomy and bio-based products in Europe, none of them has been specifically focused on forestry students.Researchers of the PerForm European cooperation network developed a quantitative online survey targeted at forestry students, including Bachelor, Master and Doctorate ones. The survey addresses students within eight countries across Europe (Austria, Finland, France, Germany, Italy, Slovakia, Sweden and Russian Federation) and aims to analyse and compare their knowledge and perception of forest-based bioeconomy today and in a future perspective. It consists of a multi-language online questionnaire structured into six sections: from students' knowledge and perception of key-concepts and topics, to concrete application for future job opportunities. A stratified sampling approach is adopted to cover the main forestry courses in selected countries. Data collection and analysis are performed as part of Master theses. Responses are analysed and compared among countries and programmes across Europe, in order to gain an up-to-date and in depth picture of the level of knowledge and perception of forest-based bioeconomy by students, as well as gaps and expectations. Findings from the survey provide useful inputs to develop future action for the promotion of education, training and skills opportunities in forest-based bioeconomy across Europe, thus contributing to key-actions defined by the 2018 European Union (EU) Bioeconomy Strategy Action Plan.