

Heavy-duty vehicles can increase the efficiency of timber transport and reduce emissions to the environment.

Transportation costs are the most costly part of wood mobilization especially in sparsely populated areas with long distances. The distance between forest and factory can be over 500 kilometers. To reduce costs of long-distance transportation of wood, bigger lorries were innovated and are now tested in Finland in a research project. The environmental effects and traffic safety are also explored.

Full utilization of HCT vehicles requires maintenance of road networks including forest roads, main roads, and bridges.

The 33-metric vehicle combination is able to carry even 70 tons of wood. The vehicle consumes less fuel than the smaller one and therefore contributes to reducing the environmental effects of transportation. The vehicles will also contribute to traffic safety since fewer vehicles will be needed to wood transportation in the future.

The research project is participated by experienced research institutes: Aalto University, Oulu University, Metsäteho, and Tampere Technical University. In the research project, the impacts on the road as well as the features of the lorries are investigated: braking distances, passing capacity, oscillations of the vehicle, and curve driving. The consumption of fuel, emissions, and durability of tires are also focused on.

Cost efficiency is gained in long-distance transportation of wood. The HCT vehicles reduce transportation costs and carbon emissions.

The first combination to transport wood started shipping with a pilot permit in December 2020.

DETALHES

ORIGEM DA MADEIRA	POTENCIAL DE MOBILIZAçãO
Floresta	High
TIPO DE MADEIRA	
Tronco	SUSTENTABILIDADE POTENCIAL - VALOR
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TIPO DE MADEIRA EM CAUSA	FACILIDADE DE IMPLEMENTAÇÃO
Stemwood	Easy
IMPACTE NO AMBIENTE E BIODIVERSIDADE	FACILIDADE DE IMPLEMENTAÇÃO
Reduces carbon emissions, consumes less fuel than smaller vehicles	_
IMPACTE NAS RECEITAS	PRE-REQUISITOS CHAVE
Positive	Involvement of relevant stakeholder, incl. traffic bureau and other authorities
POTENCIAL DE EXPLORAçãO	TIPO DE EVENTO EM QUE ESTE BPI TEM SIDO APRESENTADO
	-
HUB	IMPACTE NO EMPREGO
Pólo Norte	Positive
IMPACTE ECONOMICO	CUSTOS DE IMPLEMENTAÇÃO (EURO - EUR)
Less transportation costs, positive effect to climate change	-
CONHECIMENTOS ESPECIFICOS NECESSÁRIOS	

Skills to handle bigger vehicles

MAIS DETALHES

DESAFIO ABORDADO	DOMÍNIO	TIPO DE SOLUÇÃO
5. Melhorar o desempenho económico e ambiental	Cortes, infraestruturas e logistica	
das cadeias de abastecimento florestal		
PALAVRAS-CHAVE	SOLUçãO DIGITAL	INOVAçãO
-	Não	Não
PAÍS DE ORIGEM	ESCALA DE APLICAçãO	ANO DE INÍCIO E FIM
Finlândia	Regional/ sub-nacional	2015 - 2019
DADOS DE CONTACTO		
PROPRIETÁRIO OU AUTOR	REPóRTER	
Metsähallitus		
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REFERENCES AND RESOURCES

WEBSITE PRINCIPAL	RECURSOS
http://www.e-julkaisu.fi/metsahallitus/autoesite/	
WEBSITE DO PROJETO	
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REFERÊNCIA AO PROJETO	

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PROJETO NO âMBITO DO QUAL A FOLHA DE DIVULGAÇÃO FOI CRIADA

Rosewood

DATA DE ENTRADA

17 Set 2019







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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



