

HCT lorries (High Capacity Transport)



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.

DETTAGLI

ORIGINE DEL LEGNO

foresta

TIPO DI LEGNO

Fusto

TIPO DI LEGNO IN QUESTIONE

Stemwood

IMPATTO SULL'AMBIENTE E LA BIODIVERSITÀ

Reduces carbon emissions, consumes less fuel than smaller vehicles

EFFETTO SUL REDDITO

Positive

POTENZIALE DI SFRUTTAMENTO

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HUB

Polo Nord

IMPATTO ECONOMICO

Less transportation costs, positive effect to climate change

CONOSCENZE SPECIFICHE NECESSARIE

Skills to handle bigger vehicles

POTENZIALE DI MOBILITAZIONE

High

POTENZIALE SOSTENIBILITÀ - VALORE

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FACILITÀ DI IMPLEMENTAZIONE

Easy

FACILITÀ DI IMPLEMENTAZIONE - VALUTAZIONE

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PREREQUISITI CHIAVE

Involvement of relevant stakeholder, incl. traffic bureau and other authorities

TIPO DI EVENTO IN CUI QUESTO BPI È STATO PRESENTATO

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EFFETTO SUL LAVORO

Positive

I COSTI DI ATTUAZIONE (EURO - €)

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PIÙ DETTAGLI

SFIDA RISOLTA 5. Migliorare le prestazioni economiche e ambientali delle filiere forestali	DOMINIO La raccolta, le infrastrutture, la logistica	TIPO DI SOLUZIONE --
PAROLE CHIAVE --	SOLUZIONE DIGITALE No	INNOVAZIONE No
PAESE D'ORIGINE Finlandia	SCALA DI APPLICAZIONE Regionale / sub-nazionale	INIZIO E FINE ANNO 2015 - 2019

CONTATTI

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REFERENCES AND RESOURCES

SITO PRINCIPALE http://www.e-julkaisu.fi/metsahallitus/autoesite/	RISORSE --
SITO WEB DEL PROGETTO --	
PROGETTO DI RIFERIMENTO --	

PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA È STATA CREATA

Rosewood

DATA DI INSERIMENTO

17 Set 2019



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



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