

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.

PODROBNOSTI

PÔVOD DREVA

Les

DRUH DREVA

Kmeňové drevo

UVAŽOVANÝ DRUH DREVA

Stemwood

VPLYV NA ŽIVOTNÉ PROSTREDIE A BIODIVERZITU

Reduces carbon emissions, consumes less fuel than smaller vehicles

DOPAD NA PRÍJMY

Positive

POTENCIÁL VYUŽITIA

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ROZBOČOVAČ

Severný uzol

EKONOMICKÝ VPLYV

Less transportation costs, positive effect to climate change

POTREBA ŠPECIFICKÝCH ZNALOSTÍ

Skills to handle bigger vehicles

MOBILIZAČNÝ POTENCIÁL

High

POTENCIÁL UDRŽATEĽNOSTI - HODNOTA

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UĽAHČENIE IMPLMENTÁCIE

Easy

UĽAHČENIE IMPLMENTÁCIE - HODNOTENIE

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Kľúčové PREPOKLADY

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

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANÝ

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DOPAD NA ZAMESTNANOSŤ

Positive

NÁKLADY NA IMPLEMENTÁCIU (EURO - €)

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VIAC INFORMÁCIÍ

RIEŠENÁ VÝZVA

5. Zlepšenie hospodárskej a environmentálnej výkonnosti dodávateľských reťazcov v lesníctve

Kľúčové SLOVá

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KRAJINA PôVODU

Fínsko

DOMAIN

Ťažba, infraštruktúra, logistika

DIGITALNE RIEŠENIE

Nie

ROZSAH APLIKÁCIE

Regionálny/

TYP RIEŠENIA

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INOVÁCIE

Nie

ZAČIATOK A KONIEC ROKA

2015 - 2019

KONTAKTNÉ ÚDAJE

VLASTNÍK ALEBO AUTOR

Metsähallitus

REPORTÉR

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REFERENCES AND RESOURCES

HLAVNÁ WEBSTRÁNKA

<http://www.e-julkaisu.fi/metsahallitus/autoesite/>

PROJEKTOVÁ WEBSTRÁNKA

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REFERENCIA PROJEKTU

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ZDROJE

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PROJEKT, V RÁMCI KTORÉHO BOL TENTO INFORMAČNÝ PREHĽAD VYTVORENÝ

Rosewood

DÁTUM ODOSLANIA

17 sep 2019



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

