# 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

**MOBILZAčNý POTENCIáL**

High

**POTENCIáL UDRžATEľNOSTI - HODNOTA**

--

**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

DOMAIN

Ťažba, infraštruktúra, logistika

TYP RIEšENIA

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KľúčOVé SLOVá

--

DIGITALNE RIEšENIE

Nie

INOVáCIE

Nie

KRAJINA PôVODU

Fínsko

ROZSAH APLIKáCIE

Regionálny/

ZAČIATOK A KONIEC ROKA

2015 - 2019

## KONTAKTNé úDAJE

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REPORTéR

## 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