

# 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.

## DETALII

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### SURSA DE LEMN

Pădure

### TIPUL DE LEMN

Lemn masiv

### POTENȚIALUL DE MOBILIZARE

High

### POTENȚIAL DE SUSTENABILITATE - VALOARE

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### TIPUL DE LEMN ÎN CAUZĂ

Stemwood

### FACILITATEA DE IMPLEMENTARE

Easy

### IMPACTUL ASUPRA MEDIULUI ȘI BIODIVERSITĂȚII

Reduces carbon emissions, consumes less fuel than smaller vehicles

### FACILITATEA DE IMPLEMENTARE - EVALUARE

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### EFFECT ASUPRA VENITURILOR

Positive

### CONDIȚII CHEIE PREALABILE

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

### POTENȚIAL DE EXPLOATARE

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### TIPUL DE EVENIMENT LA CARE A FOST PREZENTAT ACEST IPB

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### HUB

Hub-ul de Nord

### EFFECT ASUPRA LOCURILOR DE MUNCĂ

Positive

### IMPACT ECONOMIC

Less transportation costs, positive effect to climate change

### COSTURI PENTRU IMPLEMENTARE (EURO - €)

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### CUNOȘTINȚE SPECIFICE NECESARE

Skills to handle bigger vehicles

## MAI MULTE DETALII

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### PROVOCARE ABORDATĂ

5. Îmbunătățirea performanțelor economice și de mediu ale lanțurilor de aprovizionare cu păduri

### CUVINTE CHEIE

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### ȚARA DE ORIGINE

Finlanda

### DOMAIN

Recoltare, infrastructură, logistică

### SOLUȚIE DIGITALĂ

Nu

### SCARA DE APLICARE

Regional/ sub-național

### TIP DE SOLUȚIE

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### INOVAȚIE

Nu

### ANUL DE ÎNCEPUT ȘI DE SFÂRȘIT

2015 - 2019

## DATE DE CONTACT

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### PROPRIETAR SAU AUTOR

Metsähallitus

### REPORTER

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## REFERENCES AND RESOURCES

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### PAGINĂ WEB

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

### WEBSITE PROJECT

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### REFERINȚĂ PROIECT

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### RESURSE

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## PROIECTUL ÎN CADRUL CĂRUI A FOST CREATĂ ACEASTĂ FIȘĂ INFORMATIVĂ

Rosewood

## DATA POSTĂRII

17 Sep 2019

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681



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## A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

