## **HCT Iorries (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** 

SURSA DE LEMN POTENţIALUL DE MOBILIZARE

Pădure High

**TIPUL DE LEMN** 

Lemn masiv POTENţIAL DE SUSTENABILITATE - VALOARE

--

TIPUL DE LEMN ÎN CAUZĂ FACILITATEA DE IMPLEMENTARE

Stemwood

IMPACTUL ASUPRA MEDIULUI ȘI BIODIVERSITĂţII FACILITATEA DE IMPLEMENTARE - EVALUARE

Reduces carbon emissions, consumes less fuel than smaller vehicles

EFECT ASUPRA VENITURILOR CONDIȚII CHEIE PREALABILE

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

POTENȚIAL DE EXPLOATARE TIPUL DE EVENIMENT LA CARE A FOST PREZENTAT ACEST IPB

HUB EFECT ASUPRA LOCURILOR DE MUNCă

Hub-ul de Nord Positive

IMPACT ECONOMIC COSTURI PENTRU IMPLEMENTARE (EURO - €)

Less transportation costs, positive effect to climate change --

**CUNOSTINTE SPECIFICE NECESARE** 

Skills to handle bigger vehicles

MAI	M	U	L٦	ΓΕ
DET	AL	П		

**PROVOCARE ABORDAT**ă DOMAIN TIP DE SOLUţIE 5. Îmbunătățirea performanțelor economice și de Recoltare, infrastructură, logistică mediu ale lanțurilor de aprovizionare cu păduri **CUVINTE CHEIE SOLUțIE DIGITAL**ă INOVAțIE Nu Nu **TARA DE ORIGINE** ANUL DE ÎNCEPUT ȘI DE SFÂRȘIT SCARA DE APLICARE Finlanda Regional/ sub-național 2015 - 2019 DATE DE **CONTACT** REPORTER PROPRIETAR SAU AUTOR Metsähallitus juha.pyhajarvi@metsa.fi **REFERENCES** AND RESOURCES \_\_\_\_\_ **PAGIN**ă WEB RESURSE http://www.e-julkaisu.fi/metsahallitus/autoesite/ **WEBSITE PROJECT REFERINță PROIECT** 

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

Rosewood

DATA POSTĂRII

17 Sep 2019







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

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





