## **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.

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**DETALJER** 

VEDENS URSPRUNG MOBILISERINGSPOTENTIAL

Skog High

**TRäTYP** 

Rundvirke HåLLBARHETS POTENTIAL - VäRDE

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TYP AV TRä ENKEL IMPLEMENTERING

Stemwood Easy

PåVERKAN På MILJÖ & BIOLOGISK MåNGFALD ENKEL IMPLEMENTERING - UTVÄRDERING

Reduces carbon emissions, consumes less fuel than smaller vehicles -

EKONOMISK EFFEKT NYCKEL FÖRUTSÄTTNINGAR

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

KOMMERSIELL POTENTIAL TYP AV EVENEMANG DÄR DENNA BPI HAR PRESENTERATS

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NAV EFFEKT ANTAL ANSTÄLLDA

Norra navet Positive

EKONOMISK PåVERKAN KOSTNADER FÖR IMPLEMENTERING (EURO - €)

Less transportation costs, positive effect to climate change --

SPECIFIKA KUNSKAPSBEHOV

Skills to handle bigger vehicles

**MER INFORMATION UTMANING SOM ADRESSERAS** TYPE AV LÖSNING **DOM**äN 5. Förbättra ekonomisk och miljömässig prestanda Avverkning, infrastruktur, logistik för skogsförsörjningskedjor **NYCKELORD** DIGITAL LÖSNING INNOVASION Nej Nej POTENTIAL START OCH SLUTÅR **UPPHOVSLAND** Regional/landsdel Finland 2015 - 2019 **KONTAKT INFORMASION** ÄGARE ELLER FÖRFATTARE **RAPPORTÖR** Metsähallitus juha.pyhajarvi@metsa.fi **REFERENCES** AND RESOURCES \_\_\_\_\_ **HEMSIDA (HUVUDSIDA)** RESURSER http://www.e-julkaisu.fi/metsahallitus/autoesite/ PROJEKTETS HEMSIDA **PROJEKTREFERENS** 

## PROJEKT SOM DETTA FACTSHEET SKAPATS INOM

Rosewood

## DATUM FÖR INLÄGG

17 sep 2019







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



