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.

DETALJER

OPPRINNELSE FOR TRE

Skog

TYPE TRE

Tre fra rundtvirke

TYPE TRE INVOLVERT

Stemwood

PåVIRKNING På MILJø OG BIOLOGISK MANGFOLD

Reduces carbon emissions, consumes less fuel than smaller vehicles

INNTEKTSEFFEKT

Positive

UTNYTTELSESPOTENSIAL

--

HUB

Northern Hub

ØKONOMISK PåVIRKNING

Less transportation costs, positive effect to climate change

SPESIFIKKE KUNNSKAPSBEHOV

Skills to handle bigger vehicles

MOBILISERINGSPOTENSIAL

High

BæREKRAFTPOTENSIAL - VERDI

--

ENKEL IMPLEMENTERING

Easy

ENKEL IMPLEMENTERING - EVALUERING

--

VIKTIGE FORUTSETNINGER

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

TYPE BEGIVENHET DER DENNE BPI HAR BLITT OMTALT

--

EFFEKT På ARBEIDSPLASSER

Positive

KOSTNADER MED IMPLEMENTERING (EURO - €)

--

MER INFORMASJON

UTFORDRING ADRESSERT

5. Forbedre den økonomiske og miljømessige ytelsen i skogbrukets forsynings kjede

DOMENE

Avvirkning, infrastruktur, logistikk

TYPE LØSNING

--

NØKKELORD

--

DIGITAL LØSNING

Nei

INNOVASJON

Nei

OPPRINELSESLAND

Finland

POTENSIALE

Regional/deler av landet

START OG SLUTT åR

2015 - 2019

KONTAKT INFORMASJON

EIER ELLER FORFATTER

Metsähallitus

juha.pyhajarvi@metsa.fi

RAPPORTøR

REFERENCES AND RESOURCES

HJEMMESIDE (HOVEDSIDE)

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

PROSJEKTETS HJEMMESIDE

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REFERANSE TIL PROSJEKT

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RESSURSER

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PROSJEKT SOM DETTE FAKTAARKET ER OPPRETTET UNDER

Rosewood

INNLEGGSDATO

17 sep 2019

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

Link to Rosewood 4.0

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY