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.

DETALJI

PODRIJETLO DRVA

Šuma

VRSTA DRVA

Deblo

ODGOVARAJUĆA VRSTA DRVA

Stemwood

UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

Reduces carbon emissions, consumes less fuel than smaller vehicles

UČINAK NA PRIHOD

Positive

POTENCIJAL ISKORISTIVOSTI

--

SREDIŠTE

Sjeverno središte

GOSPODARSKI UČINAK

Less transportation costs, positive effect to climate change

POTREBNA POSEBNA ZNANJA

Skills to handle bigger vehicles

POTENCIJAL ZA POVEĆANJE UPORABE DRVA

High

POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

--

JEDNOSTAVNOST PROVEDBE

Easy

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

--

KLJUČNI PREDUVJETI

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

VRSTA DOGAĐAJA NA KOJEM JE PRIKAZAN OVAJ BPI

--

UČINAK NA ZAPOŠLJIVOST

Positive

TROŠKOVI PROVEDBE (EURO - €)

--

VIŠE DETALJA

IZAZOV

5. Unaprjeđenje učinkovitosti lanca opskrbe šumom na gospodarstvo i okoliš

DOMENA

Sječa, infrastrutura, logistika

VRSTA RJEŠENJA

--

KLJUČNE RIJEČI

--

DIGITALNO RJEŠENJE

Ne

INOVACIJA

Ne

ZEMLJA PODRIJETLA

Finska

PODRUČJE PRIMJENE

Regionalno / podnacionalno

POČETAK I KRAJ GODINE

2015 - 2019

KONTAKT PODATCI

VLASNIK ILI AUTOR

Metsähallitus

juha.pyhajarvi@metsa.fi

IZVJESTITELJ

REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

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

WEB STRANICA PROJEKTA

--

REFERENCA PROJEKTA

--

IZVORI

--

PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood

DATUM UNOSA

17 ruj 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