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.

DETTAGLI

ORIGINE DEL LEGNO
foresta

TIPO DI LEGNO
Fusto

TIPO DI LEGNO IN QUESTIONE
Stemwood

IMPATTO SULL'AMBIENTE E LA BIODIVERSITà
Reduces carbon emissions, consumes less fuel than smaller vehicles

EFFETTO SUL REDDITO
Positive

POTENZIALE DI SFRUTTAMENTO
--

HUB
Polo Nord

IMPATTO ECONOMICO
Less transportation costs, positive effect to climate change

CONOSCENZE SPECIFICHE NECESSARIE
Skills to handle bigger vehicles

POTENZIALE DI MOBILITAZIONE
High

POTENZIALE SOSTENIBILITà - VALORE
--

FACILITà DI IMPLEMENTAZIONE
Easy

FACILITà DI IMPLEMENTAZIONE - VALUTAZIONE
--

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

TIPO DI EVENTO IN CUI QUESTO BPI è STATO PRESENTATO
--

EFFETTO SUL LAVORO
Positive

I COSTI DI ATTUAZIONE (EURO - €)
--

Più DETTAGLI

SFIDA RISOLTA

5. Migliorare le prestazioni economiche e ambientali delle filiere forestali

DOMINIO

La raccolta, le infrastrutture, la logistica

TIPO DI SOLUZIONE

--

PAROLE CHIAVE

--

SOLUZIONE DIGITALE

No

INNOVAZIONE

No

PAESE D'ORIGINE

Finlandia

SCALA DI APPLICAZIONE

Regionale / sub-nazionale

INIZIO E FINE ANNO

2015 - 2019

CONTATTI

PROPRIETARIO O AUTORE

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REPORTER

REFERENCES AND RESOURCES

SITO PRINCIPALE

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

SITO WEB DEL PROGETTO

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PROGETTO DI RIFERIMENTO

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RISORSE

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PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood

DATA DI INSERIMENTO

17 Set 2019

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Link to Rosewood 4.0

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