

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.

DÉTAILS

ORIGINE DU BOIS

Forêt

TYPE DE BOIS

Grume

TYPE DE BOIS CONCERNÉ

Stemwood

IMPACT SUR L'ENVIRONNEMENT ET LA BIODIVERSITÉ

Reduces carbon emissions, consumes less fuel than smaller vehicles

EFFET SUR LE REVENU

Positive

POTENTIEL D'EXPLOITATION

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HUB

Pôle Nord

IMPACT ÉCONOMIQUE

Less transportation costs, positive effect to climate change

CONNAISSANCES SPÉCIFIQUES REQUISES

Skills to handle bigger vehicles

POTENTIEL DE MOBILISATION

High

POTENTIEL DE DURABILITÉ - VALEUR

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FACILITÉ D'IMPLÉMENTATION

Easy

FACILITÉ D'IMPLÉMENTATION - ÉVALUATION

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PRÉREQUIS CLÉS

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

TYPE D'ÉVÉNEMENT OÙ CETTE ICPE A ÉTÉ PRÉSENTÉE

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EFFET SUR L'EMPLOI

Positive

COÛTS D'IMPLÉMENTATION (EURO - €)

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PLUS DE DÉTAILS

DÉFI CONCERNÉ	DOMAINE	TYPE DE SOLUTION
5. Accroître les performances économiques et environnementales de la chaîne logistique forestière	Récolte, infrastructure, logistique	--
MOTS-CLÉS	SOLUTION DIGITALE	INNOVATION
--	Non	Non
PAYS D'ORIGINE	ECHELLE D'APPLICATION	DÉBUT ET FIN D'ANNÉE
Finlande	Régionale/subnationale	2015 - 2019

INFORMATIONS DE CONTACT

PROPRIÉTAIRE OU AUTEUR

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RAPPORTEUR

REFERENCES AND RESOURCES

SITE WEB PRINCIPAL

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

SITE WEB DU PROJET

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RÉFÉRENCE DU PROJET

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RESSOURCES

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PROJET SOUS LEQUEL CETTE FICHE D'INFORMATION A été CRééE

Rosewood

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

