

## 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.

## DETALHES

---

### ORIGEM DA MADEIRA

Floresta

### TIPO DE MADEIRA

Tronco

### TIPO DE MADEIRA EM CAUSA

Stemwood

### IMPACTE NO AMBIENTE E BIODIVERSIDADE

Reduces carbon emissions, consumes less fuel than smaller vehicles

### IMPACTE NAS RECEITAS

Positive

### POTENCIAL DE EXPLORAÇÃO

--

### HUB

Pólo Norte

### IMPACTE ECONOMICO

Less transportation costs, positive effect to climate change

### CONHECIMENTOS ESPECIFICOS NECESSÁRIOS

Skills to handle bigger vehicles

### POTENCIAL DE MOBILIZAÇÃO

High

### SUSTENTABILIDADE POTENCIAL - VALOR

--

### FACILIDADE DE IMPLEMENTAÇÃO

Easy

### FACILIDADE DE IMPLEMENTAÇÃO

--

### PRE-REQUISITOS CHAVE

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

### TIPO DE EVENTO EM QUE ESTE BPI TEM SIDO APRESENTADO

--

### IMPACTE NO EMPREGO

Positive

### CUSTOS DE IMPLEMENTAÇÃO (EURO - EUR)

--

## MAIS DETALHES

---

<b>DESAFIO ABORDADO</b>	<b>DOMÍNIO</b>	<b>TIPO DE SOLUÇÃO</b>
5. Melhorar o desempenho económico e ambiental das cadeias de abastecimento florestal	Cortes, infraestruturas e logistica	--
<b>PALAVRAS-CHAVE</b>	<b>SOLUÇÃO DIGITAL</b>	<b>INOVAÇÃO</b>
--	Não	Não
<b>PAÍS DE ORIGEM</b>	<b>ESCALA DE APLICAÇÃO</b>	<b>ANO DE INÍCIO E FIM</b>
Finlândia	Regional/ sub-nacional	2015 - 2019

## DADOS DE CONTACTO

---

### PROPRIETÁRIO OU AUTOR

Metsähallitus

juha.pyhajarvi@metsa.fi

### REPÓRTER

## REFERENCES AND RESOURCES

---

### WEBSITE PRINCIPAL

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

### WEBSITE DO PROJETO

--

### REFERÊNCIA AO PROJETO

--

### RECURSOS

--

---

PROJETO NO ÂMBITO DO QUAL A FOLHA DE DIVULGAÇÃO FOI CRIADA

Rosewood

DATA DE ENTRADA

17 Set 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

