

## 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.

## DETALLES

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### ORIGEN DE LA MADERA

Bosque

### TIPO DE MADERA

Madera en rollo

### TIPO DE MADERA AFECTADA

Stemwood

### IMPACTO EN EL MEDIO AMBIENTE Y LA BIODIVERSIDAD

Reduces carbon emissions, consumes less fuel than smaller vehicles

### EFFECTO SOBRE LOS INGRESOS

Positive

### POTENCIAL DE EXPLOTACIÓN

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### HUB

Eje Norte

### IMPACTO ECONÓMICO

Less transportation costs, positive effect to climate change

### CONOCIMIENTOS ESPECÍFICOS NECESARIOS

Skills to handle bigger vehicles

### POTENCIAL DE MOVILIZACIÓN

High

### POTENCIAL DE SOSTENIBILIDAD - VALOR

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### FACILIDAD DE APLICACIÓN

Easy

### FACILIDAD DE IMPLEMENTACIÓN - EVALUACIÓN

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### PREREQUISITOS CLAVE

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

### TIPO DE EVENTO EN EL QUE SE HA PRESENTADO ESTA IFS

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### EFFECTO SOBRE EL EMPLEO

Positive

### COSTES DE IMPLEMENTACIÓN (EURO - €)

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## MÁS DETALLES

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### RETO ABORDADO

5. Mejorar el rendimiento económico y medioambiental de las cadenas de suministro forestal

### PALABRAS CLAVE

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### PAÍS DE ORIGEN

Finlandia

### DOMINIO

Aprovechamiento, infraestructura, logística

### SOLUCIÓN DIGITAL

No

### ESCALA DE APLICACIÓN

Regional/sub-nacional

### TIPO DE SOLUCIÓN

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### INNOVACIÓN

No

### AÑO DE INICIO Y FIN

2015 - 2019

## DATOS DE CONTACTO

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### PROPIETARIO O AUTOR

Metsähallitus

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### REPORTADOR

## REFERENCES AND RESOURCES

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### SITIO WEB PRINCIPAL

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

### SITIO WEB DEL PROYECTO

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### REFERENCIA DEL PROYECTO

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### RECURSOS

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PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood

FECHA DE MENSAJE

17 Sep 2019

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

