Description of best practice

Best practice	
Title	HCT lorries (High Capacity Transport)
Picture	
Domain	Logistics
Source of wood	Stemwood
Location	Rovaniemi, Finland
Implementers	Metsähallitus (state forest enterprise) and transportation entrepreneurs
Actual status	Running 76 tons and 84 tons, testing 104 tons
Approach	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.
Main results	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 environmental effects of transportation. The vehicles will also contribute to traffic safety, since less 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 tyres are also focused on. Cost efficiency is gained in long distance transportation of wood. The HCT vehicles reduce transportation costs and carbon emissions.

Lessons learned	Full utilization of HCT vehicles require maintenance of road networks including forest roads, main roads and bridges.
Contact information	juha.pyhajarvi@metsa.fi
Link to website	http://www.e-julkaisu.fi/metsahallitus/autoesite/
Code	BP_FI_07

Best practice assessment

Region	Finland
Time scale	Since 2015
Mobilization Potential	High
Kind of wood concerned	Stemwood
Sustainability Potential	Medium
Impact on environment & biodiversity	Reduces carbon emissions, consumes less fuel than smaller vehicles
Ease of implementation	Easy
Economic impact	Less transportation costs, positive effect to climate change
Job effect	Positive
Income effect	Positive
Specific knowledge needed	Skills to handle bigger vehicles
Costs of implementation	Medium
Technical readiness level	Applicable
Key information for adoption	Involvement of relevant stakeholder, incl. traffic bureau and other authorities