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Improved trucking logistics in Canada: Great savings but limited uptake

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The needs and motives to increase the overall efficiency of fibre flow operations in Canada are numerous. An improved fibre flow is one important key-success factor to implement a competitive value chain. The forest industry must adequately manage fibre and end-products' inventories in terms of assortments, qualities, species, and freshness with the reality of seasonal deliveries. Improving fibre flow should aim to better schedule trucks, trains and barges with consideration for harvesting sequences, driver needs, and various capacity constraints. High costs and environmental pressure are also key issues in transportation, a major component of delivered product costs. Some regions in Canada have mid-term timber supply shortages and need to bring fibre from remote areas. Other regions try to overcome a lack of manpower with a better use of truck fleets and drivers to supply mills. In secondary transformation, shorter lead times and a large product mix challenge the ability of achieving full truckloads of finished products when trying to meet end users' expectations.

FPInnovations is actively working to demonstrate the benefits of better fibre flow and to implement multimodal transportation systems adapted to local conditions. Many innovative tools adapted to the needs of its membership were developed with the support of Canadian universities. The use of our tools in various case studies showed a high potential to reduce transportation costs from 5 to 10%. Other benefits identified were higher truck utilization, energy intensity reduction, improved customer service delivery, and higher truck fill rates. These benefits are amplified with a better fibre allocation, revisited transport configuration and the implementation of merchandizing yards.

However, the implementations of advanced logistics solutions have received a limited industrial uptake, so that the industry has been unable to capture the benefits. One key implementation issue is to develop mechanisms to foster collaboration among users in transportation and processing units. This presentation will give an overview of the motives, approaches, obstacles and potential benefits to improve fibre flow in Canada with the help of various case studies.