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**TCS – AN OPERATIONAL SYSTEM FOR CONTROL AND OPTIMIZATION OF FOREST BIOMASS LOGISTICS**

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During last 10 years the usage of forest biomass in energy production has rabidly increased in many countries. EU climate policy and renewable energy target is pushing further pressure on improving the cost-efficiency and competiveness of forest energy for utilizing will increase in the next few years. With increasing volumes of forest biomass the possibilities of using IT-solutions for optimization and control of forest biomass logistics has increased dramatically. This paper introduces an innovative information system (TCS) for control and optimization of forest biomass logistics. TCS system is based on state-of-art optimization algorithms and modern it-technology including mobile and GIS solutions. The system supports operative planning as well as strategic decisions. The aim of this paper is to prove the concept with real life data and show the potential savings.