



JSC “Latvia’s State Forests”  
Latvian State Institute of Wood Chemistry  
Latvia University of Life Sciences and Technologies  
JSC “Latvenergo”

The research

**In-depth research on possibility to produce hardwood  
(aspen and birch) mechanical pulp**

**ANNOTATION**

**Riga, May 2020**

The research “In-depth research on possibility to produce hardwood (aspen and birch) mechanical pulp” was ordered by the JSC “Latvia’s State Forests”. The research was performed by the Latvia University of Life Sciences and Technologies, Latvian State Institute of Wood Chemistry as well as by the experts of JSC “Latvenergo”, JSC “Latvia’s State Forests” and JSC “Latvijas Finieris”.

The objective of the research is to assess the potential to produce mechanical pulp from aspen and birch in Latvia.

The research contains information and analysis of nine main work tasks studied.

In the research are analysed binding policies and regulatory documents as well as strategic level policies related to the mechanical pulp production. The analysis of regulatory documents related to the environmental impact assessment procedure was made. The review continues with the analysis of the regulatory framework to obtain a permission for the commencement of polluting activities.

The study provides an evaluation of aspen and birch wood resources at geographical level, their availability and quality. The assessment of exported volume of birch and aspen is made. The possibilities and availability of the resources and supplies of certified aspen and birch pulpwood in Latvian market were analysed. The analysis of logistics costs shows what is more favourable option to transport – pulpwood or mechanical pulp.

An overall general analysis of pulp and paper market has been carried out. The largest producers of mechanical pulp are identified, and the assessment of potential market share of the eventual plant is made.

Four plant potential location sites have been reviewed and compared with each other based on the main set-up criterias in order to evaluate the site conformity.

The report suggests the most favourable mechanical pulping method – the method which ensures the wide variability of the features of the products and better performance.

The calculations have been made for the necessary amount of pulpwood deliveries, energy, water and other resources for three different production capacities.

The study also contains an indicative assessment of the impact of production facility from a climate policy and socio-economic perspective. In the context of climate policy, calculations are in accordance with the IPCC guidelines used in official calculations of GHG emissions/carbon sequestration.

An initial investment costs and financial model of the production facilities were developed. The internal and external risks relevant to development and construction phase of the plant were identified. Also, the mitigation measures of risks were identified.

The main findings, conclusions and recommendations of the research are summarised in the separate report, grouped in nine groups.

The reports have 715 pages, it contains 160 tables, 286 figures, with 439 source references.

The research was commissioned by the JSC “Latvia’s State Forests”.