

# VALORISATION OF WOOD PULP SIDE STREAMS

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*In this case study, a forestry product company engaged CPL Business Consultants to look at the potential to valorise products from its wood pulp side streams. As a result, CPL provided an overview of the potential products, their markets and strategic recommendations on how the client should proceed.*

## **OBJECTIVE**

The study aimed to assist our client in understanding the market potential for co-products valorised from wood pulp side streams, including woodchip squeezings and bark.

## **METHOD**

This report is relatively brief and focused on prioritising which compounds of interest may be commercially feasible to produce and warrant further investigation.

To assess which products were likely to be most interesting to our client, CPL ranked these using a Non-parametric Analysis Model. The ranking scored several criteria based on CPL's research and judgement, including market size, growth, competition, time to market, cost to market and overall likelihood of commercial success. In addition, the criteria were weighted according to their relative importance to the client.

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### **Objective, Background, Scope and Method**

### **Principal Findings**

- Major Wood Extractable Components
- Markets for Wood Pulp Side Streams
- Preferred Formats

### **Valorisation of Wood Pulp Side Streams**

- Strategic Recommendations
- Prioritisation of Value for Major Compounds
- Routes to Market and Target Applications
  - Feed Additive
  - Plant Protection and Nutrition Product
  - Health Ingredient Product
- Potential Returns

## Chemicals Found In Wood Extractives and Pulp Side Streams

- Analytical Measurement of X's Plug Squeezings and Bark
- Chemical Composition of Wood
- Purpose and Function of Extractives
- Polyphenols
- Flavonoids
- Stilbenes
- Lignans
- Polyphenol Extracts Suppliers
- CPL's Views on Polyphenolic Compounds as an Option for the Client
- Isoprenoids
  - Terpenes
  - CPL's Views on Isoprenoid Compounds as an Option for the Client
- Glucomannans and Galactomannans
  - CPL's Views on Glucomannans and Galactomannans as Purification Options for the Client
- Xylose or Xylitol
  - Commercial Uses for Xylitol
  - Xylitol Suppliers
  - CPL's Views of Xylitol as an Option for the Client
- Sterols and Stanols
  - Commercial Uses of Sterols and Stanols
  - Sterols and Stanols Suppliers
  - CPL's Views on Sterols as an Option for the Client
- Fatty Acids
  - Resin Acids
  - Pinolenic Acid
  - Food Applications
- Fatty Alcohols
  - CPL's Views on Fatty Acids and Fatty Alcohols as an Option for the Client

## Wood Pulp Side Streams Markets and Prices

- Market for Health Ingredients
  - Heart Health
  - Natural Antioxidants
  - Satiety
  - Cosmetics
- Market for Feed Additives
- Market for Crop Protection Products
- Market for Polyphenols
  - Polyphenol Applications
  - Marketed Sources of Polyphenols
  - Product Prices
- Xylitol
  - Prices
- Stanols and Sterols
  - Prices
- Pinolenic Acid
- Glucomannans and Galactomannans

## **26 Tables**

## **23 Figures**

*Look at our [PowerPoint Introduction](#) and Brochure describing deliverables, differentiators and case studies. You can also review [eight case studies](#).*