

BC Coastal Hem-Fir Initiative – 2012/13

Project Title	Bio-pathways Analyses for a Kraft Mill and/or Regional Cluster
Project Number	B.05
Project Leader	Bill Francis
Project Team	Gail Sherson, Andrew Goodison, Doug Singbeil, Tom Browne
Total Budget	\$150,000

Need(s)

Market pulp mills need to improve their competitiveness and extract additional economic value from the forest resource by producing bio-energy, bio-chemicals and bio-materials in addition to kraft pulp. In order to do this, the mills first need to identify and assess relevant bio-pathways options for their particular strengths (e.g. access to markets and raw materials) and their existing capital investments (e.g. equipment and infrastructure). Mill-specific bio-pathways analyses can identify best-bets.

Objectives & Approach

The objective is to produce techno-economic assessments of bio-pathways options for one kraft mill and/or a regional cluster that may include a pulp mill and one or more sawmills or related facilities. These assessments would identify suitable bio-products and technologies for the study mill (or cluster), and more generally for kraft mills in British Columbia.

The approach is:

1. Review the bio-pathways options identified in the FPAC-FPIInnovations Bio-pathways Project with mill staff and select bioproduct/technology options for assessment that are relevant to the study mills;
2. Assess the mill's capability for implementing the bio-pathways options including the existing equipment, infrastructure and logistics;
3. Prepare techno-economic assessments of the bio-pathways options including markets, product prices, capital investments and operating costs.

Benefits

The future competitiveness of BC's pulp and paper sector is critical to BC's economy and jobs. The FPAC-FPIInnovations general (not region or mill specific) Bio-pathways project identified that, on average, when a new technology is added to an existing pulp mill site, several benefits occur: an improvement in ROCE (average 3.7%), and improvements in contribution to GDP (10-25%) and employment (1-4%). Bio-pathways also identified over two dozen biomass-derived specialty chemicals and pharmaceuticals that offer much greater value-adding opportunities.

Project Tasks and Outputs – Current fiscal year

Tasks / Outputs	Expected Delivery Date
Review and select bio-pathways options for first mill	May 2012
Assess capability at first mill for implementing options; prepare report on techno-economic assessments of options	September 2012
Review and select bio-pathways options for second mill/cluster	November 2012
Assess capability at second mill/cluster for implementing options; prepare report on techno-economic assessments of options	March 2013

Status and Major Accomplishments – Previous year

New project

Performance Measures

Key Success Factor	Key Performance Indicator	Target	How the outcome of the Project supports the Program objectives
Participation of first mill	First mill agrees to participate	1 mill	Identifies relevant bio-pathways options to bring greater value from the coastal resource
Techno-economic assessments of options for first mill	Report on Techno-economic assessments of options	1 report	Assesses relevant bio-pathways options to bring greater value from the coastal resource
Participation of second mill or cluster	Second mill or cluster agrees to participate	1 mill	Identifies relevant bio-pathways options to bring greater value from the coastal resource
Techno-economic assessments for second mill/cluster	Report on Techno-economic assessments of options (2 nd mill)	1 report	Assesses relevant bio-pathways options to bring greater value from the coastal resource

Communication Strategy for Information Dissemination

Results of a non-proprietary nature will be communicated to ministry contacts in a summary report, and in presentation format at the semi-annual Steering Committee meetings and appropriate industry and public forums. Confidential company information used for techno-economic assessments (such as mill cost data) will not be shared outside the participating company.

Collaboration – Research Partners

In-kind support provided by participating kraft mills and/or regional cluster; TBD