Executive Summary

Background
While Canada’s forest products industry has been a major economic contributor, a changing global marketplace has weakened its competitiveness and resulted in mill closure, poor financial performance, and numerous direct job losses. Rethinking, re-engineering, and re-tooling are necessary as the industry considers new business practices and implements new industrial pathways. Hypothetical scenarios provide key drivers that will influence the effectiveness of industry strategies until 2020, and demonstrate their impacts on potential Bio-pathways for the interior of British Columbia and Quebec.

About the Approach
Scenario analysis provides a strategic planning method aimed at helping decision makers make flexible long-term plans. It involves developing and assessing structurally different yet equally plausible futures that reflect major business uncertainties, such as economic strength/stability, concern for the environment, and technological advances.

Re-thinking The Industry’s Future through Four Scenarios
Four scenarios¹ that represent the industry’s possible future were developed within the framework of the Bio-pathways project supported by FPAC, FPInnovations, and Natural Resources Canada. The scenarios are not predictions, but rather a means of improving our understanding of the long-term consequences of trends.

Scenario A: The World Continues Its Course
The global economy has been affected in recent years by a crisis, leading to one of the worst periods for the forest industry. Global indicators suggest we are returning to pre-crisis levels. This scenario shows developed and developing countries regaining growth rates observed from 2000 to 2006. US and Canadian housing starts recover from historically low levels and push demand and prices upward for lumber products and building materials. In Quebec and BC, emerging products, such as torrefied pellets, pyrolysis and acetate (via syngas) show the highest returns. Others, like ethanol via fermentation and OSL, are not profitable. Some traditional products (newsprint, MDF, and particle board) report negative returns.

Scenario B: Repeated Economic Meltdown
The fear of a double-dip recession materializes. The excessive public debt in the US and in EU countries has eroded market confidence. The growing dependence of developing countries on exports to developed countries is negatively impacted. Already high unemployment rates continue to increase. Finally, the real estate market continues to decline, thereby reducing the consumption of traditional forest products. The reduced growth weakens the demand for energy, already adversely affected by low investment in new oil exploration and development. The increased competitiveness of fossil-fuel energy (due to low oil prices) delays new developments in renewable energy projects. An overall reduction in profitability of most forest products is observed.

¹ Identification of the scenarios is credited to Don Roberts, Vice-Chairman of CIBC Wholesale Banking and Dr. Sten Nilsson, researcher at the International Institute for Applied Systems Analysis.
Scenario C: Skyrocketing Energy Prices
Economic growth recovers, pushing energy demand to levels even higher than before the financial crisis. Moderate growth rates in developed countries are exceeded by economic prosperity in developing countries (led by China and India). Rapid urbanization and higher living standards in these countries drive up energy use, mostly oil. While energy consumption rises, energy supply does not match expected growth rates in demand. Recently poor investment levels in oil and gas infrastructure have limited production, and lead to a period of tight supply and higher prices. The “peak oil” theory supports an increase in the price for fossil fuels. Harvesting costs for fiber increase, further reducing profit margins for the traditional industry. Partnerships become key to corporate survival. Emerging products with the highest returns are energy products.

Scenario D: Growing Carbon Economy
Government investments in clean energy, strong growth in the carbon market, and increasing interest in renewable energy all lead to a decade in which business activities adopt resource efficiency and low-carbon solutions. A dramatic growth in the pricing of carbon occurs after 2012, leading to new initiatives to build global and regional (US and EU) trading mechanisms. Carbon becomes a regulated commodity worldwide. The increasing demand for carbon offsets continues and forest lands become a key resource to provide carbon solutions. Forest-related projects become even more cost effective than green technologies. Forest lands increase in value, and clean energy technologies become cheaper. Emerging products are more affected than traditional ones, although torrefied pellets and acetate (via syngas) remain strong in both Quebec and BC.

Common Characteristics
While Scenario B presents a less optimistic outlook than the others, certain common elements can be drawn from all or most of the scenarios described. Economic change is expected, whether it is based on a continuation of the current crisis or a recovery of some form. Regaining growth rates appears to be an imperative in any recovery, while upward prices for lumber products may be a trend. The profitability of emerging products over traditional ones presents an opportunity, pointing to the need for investment in and projected success for this industry.

Linking Scenario Thinking with Operational Decisions
An important challenge is to translate these scenarios and global views to local-scale decisions. Such a framework should contain a macro model that accounts for global drivers; a national-level model that captures exogenous driving forces from the macro model; and local models that look for concrete decisions at specific locations. Further discussion is required on whether the main forces driving the future are captured in these four scenarios.

Learn more
To find out more about the Bio-pathways II project and how Canada's forest industry is moving up the forestry value chain: www.fpac.ca/bio-pathways, www.fpinnovations.ca/bio-pathways.