

# **Future Opportunities** for the **Forest Products Industry** in **New Brunswick**

## **Report of the Task Force on Investment Opportunities in the New Brunswick Forest Sector**

Submitted to:  
Business New Brunswick

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## FOREWORD

The central mandate of the Task Force on Investment Opportunities in the New Brunswick Forest Sector is to answer the following questions:

1. Are forest products a sunset industry in New Brunswick?
2. From New Brunswick's perspective, what are the most (and least) attractive investment opportunities in the traditional and emerging segments of the forest products industry?

The cost and quality attributes of forest products produced in the province are clearly critical in influencing the future prospects of the sector. However, the competitive position of the New Brunswick forest products industry will be increasingly influenced by forces external to the province. As a result, a key aspect of the study is a comprehensive assessment of global causes of change that will affect the New Brunswick industry through at least 2020. This is important because the global forest sector is facing the most fundamental set of changes in markets and public policies since the colonial era.

The report provides an assessment of how potential market opportunities match with New Brunswick's Crown and private timber base and its manufacturing capacity and industry capabilities. The report provides an evaluation of the prospects for the industry and product mix. The province's best prospects for additional investment capital may well be its existing investors. Furthermore, even before the province tries to attract new investment, it is important to understand the conditions necessary to preserve existing investment.

As highlighted in the recent CIFPAC report *Atlantic Canada's Forest Industry: Part One*,

Fibre supplies in the region are generally tight, given the prices that firms can pay and remain profitable. As a result, new uses and users must compete for fibre supplies. Developing new sectors will necessarily mean either reallocating existing supplies or finding new efficiencies within the current system.

The task force conducted its analysis during the first six months of 2008. This document is an abridged version of a more detailed advisory report submitted to Business New Brunswick. Given space limitations and competitive considerations, this document does not include a series of product-market review analyses (PMRAs) conducted for a range of traditional and emerging products in the sector. These PMRAs provide much of the basis for the rankings of product opportunities summarized in this document.

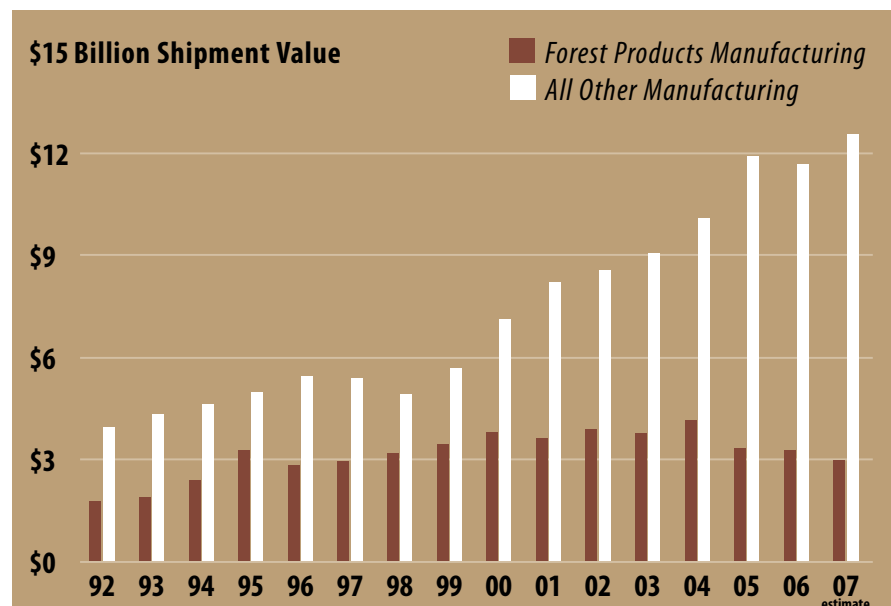
The task force report concludes with a series of observations and associated recommendations which, in our view, will facilitate further investment in the province's forest sector and create wealth for New Brunswick.

Don Roberts, managing director, CIBC World Markets Inc.  
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## EXECUTIVE SUMMARY

- The most important finding of this report is that the potential medium- and longer-term (2010-12 and beyond) outlook for the forest products industry in New Brunswick is reasonably bright. This finding is made despite a perfect storm of globally driven adversity within the industry in recent years. There are good prospects of a significant turnaround.
- However, a turnaround in global competitiveness will not happen by itself. Many difficult challenges are ahead. With success, a new, more robust – and profitable – forest sector could emerge. Without success, the serious loss of critical mass within New Brunswick’s forest products manufacturing industry could lead to further withdrawals of investment.
- Given widespread mill closures, financial losses, a significant loss of jobs and the departure of substantive global investors from the sector in recent years, it is easy to have the impression that the forest sector within New Brunswick is a sunset industry.
- Within New Brunswick’s manufacturing sector, the forest sector has not matched the pace of growth as some other key sectors (Exhibit A), and appears – on the surface – to be in relative decline. More correctly, the industry should be viewed as being in transition.



**Exhibit A - Forest Products Manufacturing Has Not Been Keeping Pace With Other Manufacturing**  
Data Source: Statscan Cansim 304-0014

- With some exceptions such as newsprint, uncoated freesheet paper and plywood, we conclude that there is a relatively good long-term market for forest products. As a result, a lack of demand is not a reason to conclude that forest products is a sunset industry.
- We are already seeing evidence that the perfect storm that has hit the provincial forest sector during the past five years is affecting jurisdictions competing with New Brunswick. This includes higher fibre prices, energy costs, labour costs, environmental costs and appreciating currencies. From an investor’s perspective, the good news is that New Brunswick’s bad news is already in the market. This cannot be said of other regions such as Western Europe, South America and Asia.

- One of the key themes of the report is that timber – whether publicly or privately owned – is increasingly scarce. Due to the combination of five different shocks to the global market for wood fibre, we think the long-term trend in real wood prices is turning positive. This has fundamentally positive implications for New Brunswick's forest sector.
  - 1) The greatest fibre price increases are expected to occur in the regions that have traditionally enjoyed the lowest cost of wood. As a result, differences in regional wood costs will be less of a factor in determining where investment will flow than they have been.
  - 2) While the Southern Hemisphere will continue to have an absolute advantage in growing trees, the comparative advantage may well be shifting back to the North.
  - 3) Higher wood prices are expected to enhance the attractiveness of investing in forest management. They are also expected to increase product prices.
- Higher energy prices and prospective pricing of carbon may be the catalyst for the commercial development of new products and markets. By providing the incentive to produce energy and chemicals from green hydrocarbons and sequester carbon from the atmosphere, they may help change the nature of the game for the forest products sector. New Brunswick can likely capture the greatest benefits from these opportunities if the forest industry helps execute them. A key reason for this is that there is a distinct cost advantage if the wood fibre is already at the plant, and joint-products can be made that use some of the existing infrastructure.
- From the perspective of allocating Crown timber, the Department of Natural Resources should be careful how it encourages the bio-energy sector. Based on European data, a given volume of wood generates eight times more value-added and 13 times more employment when used in the production of pulp and paper as opposed to energy.
- Our globally based market analyses indicate that New Brunswick has a significant number of opportunities to (a) expand capacity in established products and (b) attract new investment in an array of new growth products in new markets. Most of these are rated better than average investment prospects for New Brunswick, and many are ranked as superior opportunities (Exhibits B and C). These rankings are specific to New Brunswick and are relative to other products shown in the exhibits. They are not comparative rankings (that is, of New Brunswick compared with other jurisdictions).
- A competitive sawmilling segment should be seen as the cornerstone for a competitive forest products sector. A key reason is that sawmilling typically provides the highest return-to-log, while generating by-products, upon which the province's pulp and paper, non-structural panel and emerging bio-energy segments depend. The most significant obstacles to the province's sawmills participating in the expected 2010-12 American demand recovery and capitalizing on future growth opportunities are: (1) the loss of critical mass in New Brunswick's forest economy; (2) its almost total focus on lumber production in commodity framing grades; and, (3) minimal investments in fast-growing, secondary processed structural wood products.

**Exhibit B - Growth Prospects for New Brunswick – Group A: Ranked as Superior Opportunities**

Product Group	Ranking zero to 10 (10 = Most desirable)	Observations
<b>Wood Products Sector</b>		
Softwood Framing Lumber	9	Strong price recovery in prospect. Declining supplies of SPF from Quebec and BC
MDF/Particleboard (Supply Chain Linked)	9	Supply chain linkages provide strong competitive edge
Jobs Packs (Supply Chain Partnerships)	8	Value added opportunity for additional processing within New Brunswick
Off-site Fabricated Structural Building Components	8	Value added opportunity for additional processing within New Brunswick
<b>Pulp, Paper, Bio-Fuels and Bio-Products Sector</b>		
Dissolving Pulp (integrated with Channel Partnerships)	9	Supply chain linkages provide strong competitive edge
Tissue	8	Serves regional/local markets with good growth prospects
Co-Generated Bio-Fuels	8	This ranking assumes that NB develops a competitive green energy policy!
Bio-Chemicals	8	With expected continuation of high energy prices, this revenue stream becomes viable

**Exhibit C - Growth Prospects for New Brunswick – Group B: Ranked Above Average**

Product Group	Ranking 0 to 10 (10 = Most desirable)	Observations
<b>Wood Products Sector</b>		
2 <sup>nd</sup> Generation Engineered Wood Products, Open-Web Joists	7	Depends on a healthy and profitable structural softwood lumber sector
Appearance Grade Value-Added Products	6	Improved clustering of existing facilities and horizontal integration products needed
<b>Pulp, Paper, Bio-Fuels and Bio-Products Sector</b>		
Paper Grade Market Pulp NBSK/NHBK	7	Depends on low cost, high quality residual fibre from wood products sector
3 <sup>rd</sup> Generation Mechanical Publication Papers	6	High electricity prices and small scale of operations are NB's current constraint to expansion

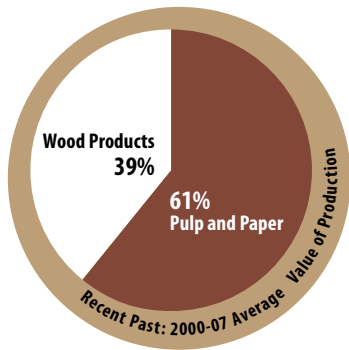
- Existing Product
- Emerging/New Product

- We have concluded that the New Brunswick forest products industry is not market-limited. However, the traditional and emerging segments of the industry appear fibre-constrained. As a result, it is unlikely the province will be able to capitalize on the full range of market opportunities unless it makes a conscious choice to enhance its commercial timber supply.
- We have also provided projections of the financial outcomes of three outlook scenarios – ranging from industry decline to recovery and growth. Compared with forecast revenues of \$2.5 billion in 2008, the Decline Scenario projects revenues falling to \$1.4 billion by 2015. In contrast, the Recovery and Growth Scenario projects revenue growth to \$4.7 billion by 2015.
- The global forest sector is facing the most fundamental set of changes in markets and public policies since the end of the colonial era. As a result, the importance of identifying and managing change has increased. It is critical that stakeholders in the New Brunswick forest sector further develop this ability.

The task force has made the following recommendations (with clarifying comments in Section 5):

1. The Government of New Brunswick should take the long view and strongly endorse the position that forest products manufacturing within the province is an economically and environmentally sustainable growth industry – with a potentially bright future.
2. If the objective is to generate wealth, the Government of New Brunswick and the industry should consider strategies to expand – not reduce – Crown and private timberland timber supply through a combination of enhanced productivity, improved forest management regimes and commercial programs for private woodlot owners.
3. The New Brunswick forest industry – notably energy intensive groundwood pulp and paper mills – needs to consider, as a matter of urgency, ways to become self-sufficient in energy and ultimately net exporters into the grid of electricity sourced from green energy technologies. Correspondingly, the Government of New Brunswick should place a high priority on facilitating this process. Various impediments to private sector co-generation exist – and have been identified in this report. In the interim, it is vital that New Brunswick's industrial electricity rates remain close to competitors' levels.
4. The Department of Natural Resources should ensure that the forest industry has the right of first refusal in using excess biomass.
5. The New Brunswick forest industry, notably wood products producers, should explore the market opportunities outlined in this report through a series of well organized industry visits to key markets in the United States. These could include proprietary market research carried out by firms independently. In addition, Business New Brunswick and other departments should work with the industry in identifying and develop export markets. Trade mission visits could be organized collaboratively.
6. The Department of Natural Resources should continue to remove impediments, such as appurtenancy rules and administratively-determined Crown timber allocations. The department should also allow market prices and competition between private sector mill and plant operators to determine the best product-market for the province. But, it should retain a key long-term role in provincial timber supply by re-affirming that the Government of New Brunswick is committed to being in the tree growing business.
7. A joint industry/government initiative should be undertaken to build analytical capacity in New Brunswick's forest sector, with an emphasis on market and strategic issues. A priority should be given to developing this capacity in the provincial government and private wood lot segment. Consideration should be given to the development of a Model Sustainable Forest-Based Community in the province. This would be a forum to develop and showcase New Brunswick's expertise in providing green products.

# 1. STRUCTURE AND RECENT EXPERIENCE OF NEW BRUNSWICK'S FOREST INDUSTRY



**Exhibit 1.1 - New Brunswick's Forest Industry Product Mix**



**Exhibit 1.2 - New Brunswick's Two Major Manufacturing Sub-Sectors Are Highly Interdependent – Economically And Financially**

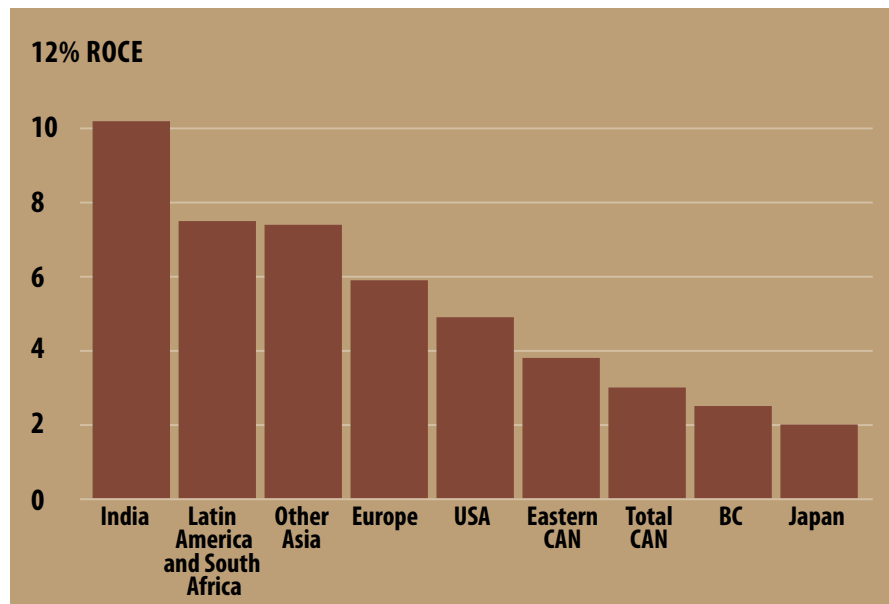
## INDUSTRY STRUCTURE

There are two major traditional manufacturing sub-sectors within New Brunswick (with bio-fuels and bio-products possibly emerging as a third sub-sector). Exhibit 1.1 shows that, for the period 2000 to 2007<sup>1</sup>, pulp and paper manufacturing accounted for 61 per cent of the sector's total production value. Wood products accounted for 39 per cent.

New Brunswick's wood products industry, although statistically smaller than its pulp and paper industry, is a vital part of the overall forest economy. In particular, the softwood lumber sector typically provides the highest return-to-log (for example, lumber production) while generating by-products upon which the province's pulp and paper, non-structural panel and emerging bio-energy segments depend.(Exhibit 1.2). This is why a competitive sawmilling segment should be seen as a cornerstone for a competitive forest products industry.

## RECENT PERFORMANCE

Significant disinvestment has occurred in the New Brunswick forest products industry in recent years in response to its poor return on capital employed (ROCE). While arguably New Brunswick has some specific disadvantages, the ROCE has been unacceptably low in most of the traditional forest product regions of the world (See Figure 1.3). This explains why there has been an on-going shift in the forest industry's geographic footprint from North America and Europe to Latin America and Asia (excluding Japan).



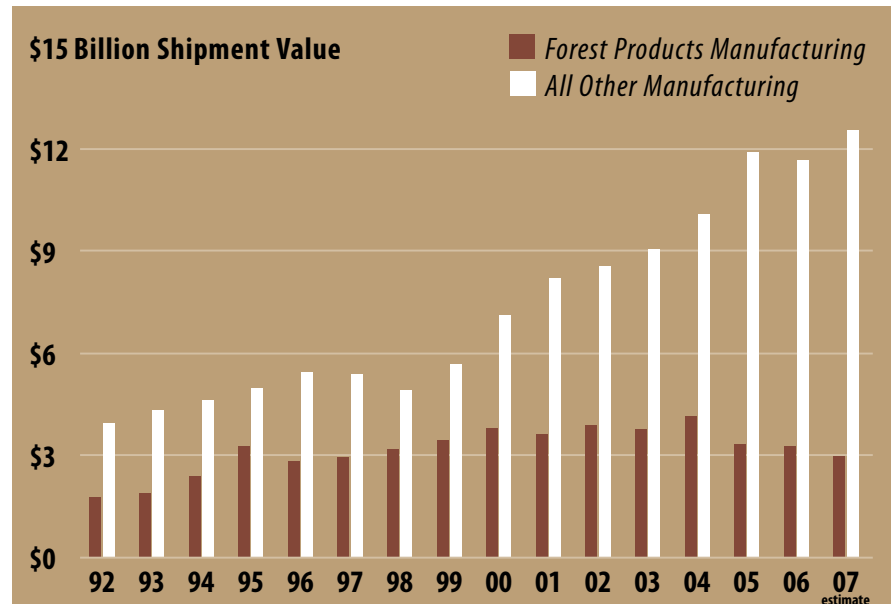
**Exhibit 1.3 - Average Return On Capital Employed (ROCE) In The Forest Products Industry, By Region (1998-2006)**

Source: PricewaterhouseCoopers, CIBC World Markets Inc.

It is understandable why the public thinks forest products may be a sunset industry in New Brunswick. Between 2004 and 2007, the value of New Brunswick's forest products manufacturing output dropped by an estimated \$1.2 billion – from a peak of \$4.2 billion in 2004 to \$3 billion by 2007 (Exhibit 1.4). This was caused directly by a loss of global competitiveness which triggered numerous mill shutdowns.

<sup>1</sup> Data for 2007 are to October YTD. The period 2000 to 2007 has been chosen to avoid any distorting impacts of market cycles.

The poor recent performance of the forest industry is underscored by the fact that the rest of the province's manufacturing sector has grown impressively over this period. These changes in combination have caused forest products' contribution to New Brunswick's overall manufacturing sector to decline to 20 per cent in 2007 from 35 per cent in 2000.



**Exhibit 1.4 - New Brunswick Forest Products Manufacturing Output**  
*Data Source: Statscan Cansim 304-0014*

Before the forest products industry is written off, it should be remembered that it doubled in size during the 1990s – based on the value of its shipments. This was followed by a period of flat to slightly rising revenue growth from 2000 to 2004. Furthermore, as argued later, structural changes are occurring in global markets that may breathe new life into New Brunswick's forest products industry.

However, it is clear that the forest industry's labour force has declined sharply since the start of the decade. Its number of employees has plummeted by roughly 50 per cent since 2000 (see Exhibit 1.5). While some of the decline (especially in the wood products business) primarily reflects cyclical factors, some segments of the industry may possibly be falling below their critical mass.



























































