



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

Report to the Council
March 2006

DRAFT FINAL
March 31st



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

March 31 2006

Dan Miller, Co-Chair
David A. Thompson, Co-Chair
BC Competition Council

Dear Sirs,

Letter of Transmittal

This report and its recommendations are being submitted by the Industry Advisory Committee (IAC) of the BC wood products manufacturing industry at the invitation of the BC Competition Council. The Committee was established in July 2005 by the Council, with a mandate to recommend key initiatives to enhance the competitiveness of the province's wood products manufacturing industry.

Our terms of reference are to evaluate competitiveness issues facing the industry, and to recommend action on two or three critical initiatives which can be acted upon expeditiously. As you are aware, the circumstances facing the BC Interior industry and BC Coast industry differ widely. A large number of urgent and substantive issues confront both regions.

Our principal recommendations are based on the Committee's conclusion that the industry itself should take a leadership role by proposing market-based solutions, along with an implementation strategy and timetable.

Correspondingly, we present for your immediate attention a *BC Coastal Industry Turnaround Plan*. As you are aware, the Coast industry is in crisis. The nature and magnitude of the crisis are explored in some depth in this report, along with our evaluation of potential solutions.

The report outlines the industry's strategy to re-position coastal wood products manufacturing for new investment, new job growth and forest-dependent community stability. We believe that a successful turnaround can be achieved. But this will require bold and unprecedented initiatives from all stakeholders in the coastal industry.

We also recommend a *Transition Plan* for the BC Interior. Despite recent increases in lumber production, and a profitable 2004, the Interior region faces a number of significant challenges. Maintaining the region in a 1st quartile globally competitive position will be difficult for the immediate future. Substantial loss of export market competitiveness has occurred recently due to exchange rate changes, and the imposition of cash deposit rates by the Department of Commerce on all Canadian softwood lumber exports to the United States.

BC's Interior costs are rising and mill revenues are declining sharply. Although the longer market outlook is encouraging, the BC Interior timber pricing system does not reflect the declining values of pine attacked by the Mountain Pine Beetle. This will continue to affect margins adversely in the immediate future.

Competitiveness in wood products is also highly dependent on a healthy and growing pulp and paper sector, and to a healthy logging sector on the Crown timber base. All three go together!

This report is both timely and appropriate. We appreciate this opportunity to present our analyses and recommendations to the Council. We look forward to discussing our recommendations and working with other participants in the sector to implement these important initiatives.

Respectfully Submitted,

John Allan
Chair



Table of Contents

Letter of Transmittal	2
Table of Contents	3
Committee Members	4
Acknowledgements and Industry Consultations	4
Executive Summary	5
SYNOPSIS OF THE DETAILED REPORT	
1. Synopsis of the Detailed Report, and Recommendations	8
BC Interior Industry	8
Committee's Recommendations for the BC Interior Industry	11
BC Interior Transition Plan	12
BC Coast Industry	12
Committee's Recommendations for the BC Coast	19
BC Coast Region Specific Initiatives	19
BC Coast Turnaround Plan	19
Province-Wide Issues	24
Committee's Recommendations for Province-Wide Initiatives	25
2: Follow-Up Steps	27
DETAILED REPORT	28
3. BC Industry Profile	30
4. Drivers of Competitiveness	48
5: BC Interior Wood Product Industry	58
<i>BC Interior Transition Plan</i>	75
6: BC Coast Wood Product Industry	80
<i>BC Coast Turnaround Plan</i>	106
7. Province-Wide Initiatives	111
<i>Committee's Recommendations for Province-Wide Initiatives</i>	117
Appendices	119
Glossary of Terms Used	120
List of Submissions Received by the Committee	121



Committee Members

John Allan
President & CEO
Council of Forest Industries

Duncan Davies
President & CEO
International Forest Products Ltd.

Jim Girvan
Executive Director
Truck Loggers Association

Ken Higginbotham
VP, Forestry & Environment
Canfor Corporation

Rick Jeffery
President & CEO
Coast Forest Products Association

Hank Ketcham
Chairman, President & CEO
West Fraser Timber Co. Ltd.

Paul McElligott
President & CEO
TimberWest Forest Corp.

Al Thorlakson
President & CEO
Tolko Industries Ltd.

Mark Semeniuk
Chief Operating Officer
Atco Lumber Limited

Peter Woodbridge
Consultant to the Committee.
Woodbridge Associates Inc.

Acknowledgements and Industry Consultations

As Chair, I wish to acknowledge the significant contributions of the Committee members and all of those who participated in the preparation of our report. I very much appreciate the willingness of industry firms to make their resources available. During our deliberations we consulted with the senior management of several industry firms and associations that are not represented directly on the Committee. A list of these is provided in the Appendix.

The report was written by Peter Woodbridge on behalf of the Committee. It is based on interviews, meetings and inputs from Committee members and their respective firms. Woodbridge Associates Inc. also provided the research, analyses and many of the graphics used throughout the report. I would like to thank Peter and his staff for their outstanding efforts in providing these facilities and in assembling the report.

I would also like to thank my own staff, along with several companies that provided photographs and illustrations, the BC Ministry of Forests and Range, PricewaterhouseCoopers, David Cawood, Wood Markets, RISI and numerous industry contacts who have provided key data and guidance in shaping the report and recommendations. In several cases, we have made references to existing industry and consultancy studies and we appreciate the opportunity to do so. Appropriate citations are provided throughout the report.

John Allan. Chair



Executive Summary

Forest products manufacturing is a growth industry.

Between 1993 and 2003, the value of international trade in wood and forest products grew by 50%—from US\$100 billion to over US\$150 billion¹. Projections indicate that global trade will continue to grow, at over five percent per year. The industry is highly innovative in new product development—and is cost competitive against most alternative raw materials, such as concrete, metals, plastics and non-wood composites.

Canada plays a key part in this rapidly growing, but highly competitive, global business. It has established itself as the world's leading exporter of wood products. Forest products manufacturing and export earnings have become vital to the economy of every Canadian province. In 2005, the BC forest industry alone exported over C\$13 billion of forest products to the US and other world markets².

In wood products, Canada's share of global lumber exports, in value terms, rose from 5% of the total in 1964 to 15% by 2004. Helped by a surge in OSB investment, Canada's share of wood panel exports rose to a 7% global market share by 2004.

BC has been a key player in this expansion, through its substantial investments in new manufacturing capacity, people skills and expansion of its share of the rapidly growing US market.

However, BC's role as a supplier is evolving. Its competitiveness is declining. New, lower cost and highly efficient supply regions have emerged, and have captured market share in many of BC's *traditional* product-markets. This trend will continue.

For BC, Conditions have Changed

Within a decade, BC's wood products manufacturing industry is likely to be very different from today.

Raw material supply and costs are a key issue. Manufacturers in BC depend primarily on public timber for sawlog supply. The quality of BC's Crown timber reserves has been declining. Harvesting and other costs have been rising. Land changes are taking place. First Nations increasingly are involved in the industry.

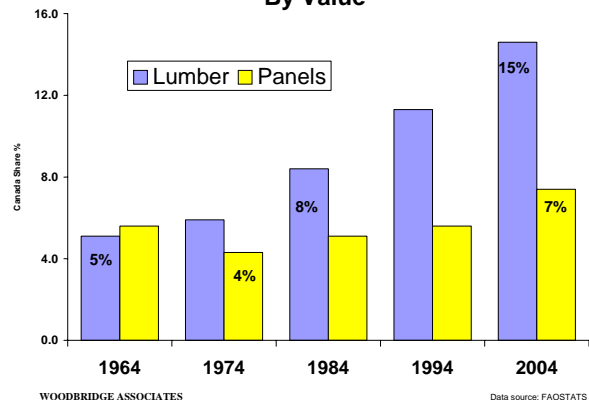
Vast areas of the BC Interior region are under beetle attack—and accelerated salvage harvesting is underway. For sustainable management, this means the region's volume expansion cannot continue over the long term. On the BC Coast, the commercial timber resource has been substantially under-utilized for several years. Manufacturing operations in this region are chronically unprofitable. Investments in high technology new mills could be attracted if the region harvests more second growth timber volumes, and if its cost structure improves dramatically. Even so, harvesting of old growth timber will remain vital to the economics of the coastal wood products and paper industry for some time to come.

Market conditions are shifting. Canada's currency-induced export market competitiveness has virtually been eliminated—over a very short period of time. The value of Canada's dollar rose from 63 cents in US funds in early 2002 to around 85-88 cents by early 2006. A similar loss of BC's currency-induced competitiveness has occurred in other export markets, such as Japan.

US trade actions have sharply reduced the corporate liquidity of most Canadian softwood lumber manufacturers, forcing many to re-structure. BC is implementing market-based timber pricing reforms and is committed to an open, market-based forest economy. This is vital for its global competitiveness.

Technology plays an important role. Evolving markets and new product technologies are driving a shift in construction markets towards increased use of "value-added" engineered wood products and building components. Today, these represent only a small part of BC's wood product mix.

**Canada's Share of World Exports
By Value**



¹ United Nations FAO www.fao.org

² Statistics Canada Strategis www.statcan.ca



Perhaps more than any other factor, the key to competitiveness for the BC industry will be the skills and dedication of its workforce. Leading-edge manufacturers worldwide gain substantial competitive leverage from the shift to knowledge-based and innovation-focussed manufacturing operations. BC can do the same.

Globalization: The Manufacturing Cost Curve has Shifted

Once one of the world's lowest cost producers, BC's wood products industry has experienced rapidly rising costs—which still persist throughout many aspects of its logging and manufacturing operations.

BC Coast manufacturers have been unable to attract sufficient capital to rebuild their aged and inefficient sawmills to state-of-the-art levels. There is a high level of uncertainty and risk for wood products investment in the region. Traditional markets in Japan have been lost. Access to alternative markets in the US has been restricted. The BC Coast region has the highest sawmilling labour costs in North America, and its overall costs are low 4th quartile. There are opportunities for coastal industry recovery, and a shift towards value-added products. But radical changes are needed to realize the coast region's full potential.

BC's Interior wood products industry has also been hit by high costs. It has remained competitive by investing continuously and very heavily in new large scale mills ('supermills') and new equipment. The region has the highest levels of sawmill and OSB mill productivity worldwide. Helped by "24/7 operations"³, the Interior industry in 2004 achieved 1st quartile unit costs of manufacturing. BC Interior firms are pioneers in new supply chain relationships with retail distributors and US homebuilders.

BC's Regulatory Environment

Crown timber management is based on multiple use principles. A wide range of timber values other than industrial forestry defines land use. Sub-optimization of the commercial land base is one result. In the 1990s, BC's forest sector became one of the most highly regulated in the world. Capital began to leave. Mills closed. Jobs were lost. The economic base of many BC rural communities began to erode. Subsequent regulatory and structural changes have improved the province's business and investment climate. The 2003 Forest Revitalization Plan has been very beneficial. But BC forest products manufacturing firms still face formidable obstacles and higher costs in obtaining cutting and other approvals.

Sector Interdependence

Worldwide, there is a shift in capacity growth in pulp and papermaking to new manufacturing areas in the southern hemisphere, parts of Europe and Asia. Extensive mill closures are taking place in areas such as Ontario, Quebec and the Atlantic Provinces—exacerbated by the loss of currency-induced competitiveness, high wood costs, rocketing fuel costs and timber supply shortages. BC's pulp and paper manufacturing sector, which is the subject of a separate report to the Council, is adjusting to the new global picture. The playing field is not level. Importantly, any changes made in one sub-sector of BC's forest economy quickly affect all others. As the BC industry re-sizes, a new balance of inter-sector critical mass has to be achieved.

Challenges and Choices: Vision of BC's Future

BC is not limited by market opportunities. But it is likely that BC's wood products manufacturing industry in the future will be smaller, in terms of its output volume of primary processing and commodity products. There is substantial potential to add value within BC to primary wood products, and develop new products and markets. In recent years, the industry has presented its vision of sustainable growth in wood products manufacturing. Some of the opportunities identified by the industry are summarized in this report.

Key to the BC industry's vision is the belief that forest products manufacturing is a long term business—and a vital part of the province's current and future economy. However, investment capital can only be attracted and retained in this globally competitive industry if the rate of return is adequate. To date, it has not been.

An Industry-Led Action Plan is Proposed

This report has been developed by an industry committee of the BC wood products manufacturing sector. It outlines the industry's proposals for an **industry-led action plan** to achieve sustainable levels of global competitiveness. Two sets of plans are presented—to meet the distinct needs of the BC Coast region and the BC Interior region, respectively. In addition province-wide recommendations are made. Importantly, although some specific requests are made of government, the industry believes that market-based solutions, supported by key stakeholders, are the keys to successful implementation of these plans.

³ Popularly refers to BC supermills operating "24 hours per day, seven days per week". In fact, to allow for scheduled maintenance and downtime, most supermills operate less than this – but considerably more hours than the traditional two-shifts.



SYNOPSIS OF THE DETAILED REPORT AND COMMITTEE'S RECOMMENDATIONS



1. Synopsis of the Detailed Report, and Recommendations

- ◆ BC's wood products manufacturing sector comprises two very distinct regional industries. The BC Interior industry is a world class highly productive producer of softwood lumber and structural panelboards, with many 1st quartile mills. The BC Coast lumber industry suffers from some of the highest production costs in the world, and is in decline. The province has an emerging secondary processing industry.
- ◆ The province's forest economy is driven by its wood product industry. Over many years, competitive leverage has been achieved through the very efficient use of available fibre. As a result, the economics of the wood products and pulp and paper manufacturing sectors are inextricably bound together. This vital relationship is breaking down as parts of the sector streamline and consolidate.
- ◆ Both of BC's primary manufacturing regions face substantial challenges. For the Coast, the challenge is survival. For the BC Interior, it is how to remain positioned as a globally cost-competitive supplier to US and other export markets.
- ◆ Historically, competitiveness in both regions was driven by common factors. Both had a natural resource endowment which gave a push to initial industrialization. Subsequently, like much of Canada's all-industries manufacturing sector, currency-induced competitiveness boosted the regions' fortunes. Over the past two decades, the Coast and Interior industries have taken dramatically different paths.

BC Interior Industry

- ◆ A key distinguishing feature of the BC Interior wood product industry is the *ability of manufacturing firms to adapt their various business models to accommodate change—and attract capital investment.*
- ◆ BC Interior firms consistently invest heavily in state-of-the-art equipment, and large scale automated mills. The region has always focused on productivity gains as an ongoing means of gaining and maintaining its competitive edge. Despite sometimes severe market cycles, US trade actions on softwood lumber imports, and fluctuating earnings, this approach has been very successful.

Chart A

Currency-Induced Rise & Decline in BC's Competitiveness in US Lumber Market





BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

- ◆ The most recent phase in BC Interior wood products competitiveness has occurred relatively recently. Faced with punitive US market cash deposit rates of up to 27% (Chart A), the region faced a strategic watershed—lose competitiveness and market share, or fight back. The response of firms was to consolidate, rationalize and embark on a major thrust of new capital investment, advanced technology adoption and productivity gains.
- ◆ Technology, investment and productivity were linked to a major shift in operating procedures. Many lumber mills have gone to “24/7” hours of operation, running almost continually—as do OSB and pulp and paper mills. The result has been to substantially drive down unit costs of manufacturing.
- ◆ Two sets of factors were conducive to this success. Firstly, the provincial government introduced important changes after 2001—notably the Forest Revitalization Plan of March 2003. This substantially reduced previous excesses in regulation and allowed the industry to streamline and consolidate along market-driven lines.
- ◆ Secondly, BC Interior labour unions were supportive of workplace changes permitting significant productivity gains to be made. The Interior industry is increasingly capital intensive. It is a showcase for the world, in terms of advanced processing technologies—and BC Interior sawmill workers are highly productive.
- ◆ Shareholders have not done well, to date, from their investments in the industry. Throughout BC, over \$17 billion of capital is invested. Over twenty years, the industry’s average annual rate of return on capital employed (ROCE) is 6%. The cost of capital is 10% - 13%.
- ◆ The BC Interior region is heavily dependent on access to the US market for its spruce-pine-fir (SPF) lumber exports. Lower unit costs have allowed the province’s SPF lumber industry to maintain its share of this vital market—and have helped Interior firms offset some of the financial pain imposed by US high cash deposit rates.
- ◆ Over the past four years, BC Interior firms have paid over C\$2.8 billion in countervailing and anti-dumping duties to the United States. For most of this period, combined cash deposit rates were 27%. Based on massive new investments in equipment and technology, the productivity surge achieved by BC’s SPF industry is the key factor behind the region’s ability to maintain its US market share—and survive.
- ◆ Another global ‘first’ for the BC interior wood product industry is its management of changes being driven by the rapid evolution of the global supply-chain. BC Interior firms have become pioneers in developing new relationships with supply-chain partners ranging from retail to large homebuilders and major distributors. In the process, BC Interior firms are not just selling wood products. They have developed new products and new knowledge-intensive services as part of these evolving relationships.
- ◆ Recent Department of Commerce decisions have led to lower cash deposit rates on imports of Canadian lumber into the United States, but much of the potential boost to competitiveness has been offset by the rising value of the Canadian dollar (Chart A).
- ◆ The BC Interior region wood product industry’s buoyant earnings in 2004 were also offset, for major integrated firms, by losses in the pulp and paper sector. In addition, a variety of factors indicate that the region’s competitiveness in primary wood product manufacturing declined in 2005—and most likely will continue to decline for the foreseeable future.

Future Competitiveness of the BC Interior

- ◆ The mountain pine beetle (MPB) epidemic and declining rates of growth in productivity gains are two key reasons for the expected loss of future competitiveness in the BC Interior wood product industry.
- ◆ Salvage harvesting of MPB-killed timber is providing a short term boost to the region. The extent of the epidemic is unknown. Salvage harvesting could continue for the next ten years, and maybe longer. However, the epidemic is having serious and adverse impacts on the medium to longer term prospects for the region. Many immediate adverse impacts have also becoming apparent.

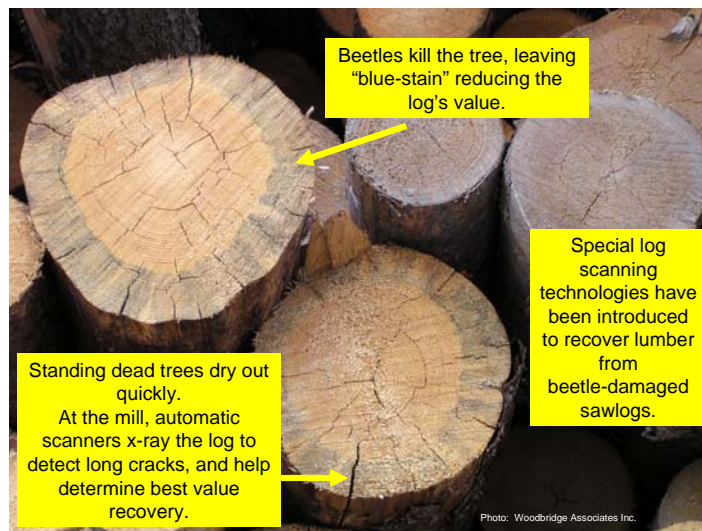


BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

- ◆ One is the huge surplus of residual chips (along with shavings, sawdust and hog fuel) being generated by rising harvests of salvage timber. Sawmill income from sales of residual by-products has declined by around 50% over the past year. Another set of impacts is the breakdown in the healthy level of inter-dependency between independent wood product producers and the region's pulp and paper sector. This is an inevitable evolution, but costly.
- ◆ Dead, standing, lodgepole pine trees and other species do not have the same quality or value as live, healthy 'green' trees. This is referred to as the "value-slide" taking place in the public timber resource.
- ◆ The reality is that BC's timber resources are worth far less than when the province was one of few suppliers to world markets. The public generally is not aware of this. Many perceive the province's Crown timber resources to be a huge store of ongoing wealth. A culture of "entitlements" has developed and, in many cases, been fostered. BC does have substantial forest resources, but without capital, people and entrepreneurship, there cannot be a sustainable and globally competitive manufacturing industry.

Chart B

CAPEX and Technology are Being Used to Recover Value from Beetle-Killed Timber



- ◆ The BC Interior industry is doing a good job in dealing with the beetle epidemic. It is investing heavily to recover value from the infected timber (Chart B). Provincial, federal and municipal/regional government initiatives relating to R&D and community adjustment are helping. But the magnitude and full impacts of the disaster are yet to be determined.
- ◆ The MPB epidemic is likely to wipe out most the mature pine timber in the BC Interior. There are serious questions about what future harvest levels will be possible. There are concerns too about the natural environment and about safety-issues (e.g. wildfires).
- ◆ From a global competitiveness viewpoint, there is significant uncertainty about what scale of manufacturing the industry will be able to survive in the post-MPB era. Huge amounts of capital will be needed for forest renewal. Public sector capital is limited. Private capital will be required. Innovative approaches to new tenures will be needed.
- ◆ Fortunately, growth in the US market (the main export market for BC Interior producers) is projected to be buoyant (although continuing to be cyclical).



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

- ◆ Assuming an equitable and permanent settlement of the US-Canada softwood lumber dispute, and ongoing market access, BC Interior producers will be able to expand and intensify their product mix and sell into these expanding markets. New markets in China and elsewhere also are being developed.
- ◆ As BC Interior wood products manufacturing competitiveness declines over the next decade, the following developments are likely to occur:
 - SPF producers will lose market share in Japan (MPB lumber is extensively blue-stained and not accepted readily in this market). Overall, more lower grade product will be produced. Firms will find it hard to supply growing US market demand for higher grades (e.g. J-grade and square-edge lumber). More engineered wood products will be produced. New offshore markets (and sources of lumber) will be pursued;
 - Slower rates of gain in manufacturing productivity in the mills will force firms to find improved economics in the stump-to-mill supply chain. This will become a vital area for obtaining cost reductions and improving profit margins. Government costs are a major factor;
 - Bio-energy opportunities will provide a means of improving residual fibre utilization and will help restrain the rise in purchased energy costs;
 - Further consolidation and rationalization of the industry will be vital to an economic balance between available sawlogs and manufacturing facilities in the post-MPB era.
- ◆ From a competitiveness perspective, the main implications of these trends are that:
 - (a) Further changes in BC Interior manufacturing business models will be essential;
 - (b) Favourable operating conditions (including improvements in the regulatory environment and reductions in government-linked costs) will be required to facilitate the transition;
 - (c) Profit margins, and an adequate ROCE, will only be achieved if further significant declines in overall costs are attained. Investments have a large CAPEX 'footprint'. For the BC Interior, a new state-of-the-art pulpmill would cost over \$1 billion. Without an adequate rate of return, it's unlikely that these types of investments will be ever be made again in BC;
 - (d) Operating uncertainties must be reduced substantially (ranging from secure access to markets to land use and land claims);
 - (e) Forest dependent and other communities will need to "buy in" to creating and maintaining a viable forest products manufacturing sector (implying the need for fairness in costs, such as large industry property taxes).

Committee's Recommendations for the BC Interior Industry

The Committee's principal recommendation for the BC Interior wood product industry focuses on the need for ongoing cost reductions in the Crown timber supply chain, greater P3 efficiencies and ensuring certainty in future timber supply. Specifically, the Committee recommends that:

*The Industry should take primary responsibility for managing strategic and operational transitions in manufacturing activities located within the region through a **BC Interior Transition Plan**. The Government of BC should work with industry to ensure that adequate supplies of economically accessible logs are provided to Interior mills on a market-pricing basis. Government at all levels should provide sufficient resources to ensure that all public sector services, and supporting policies, and interfaces with industry and service providers including infrastructure support, are provided and implemented in a cost-effective, sustainable, timely and commercial manner.*

Softwood Lumber Trade Negotiations

Clearly, this is one of the most urgent and substantial issues affecting the competitiveness of the BC lumber industry. It is discussed extensively in this report. However, as a national process is in place dealing with it,



the Committee has not made any recommendations regarding this issue other than that a “US market access” filter should be applied to all government policy changes.

BC Interior Region Specific Initiatives

BC Interior Transition Plan

Under the proposed *Transition Plan*, specific initiatives for the BC Interior region should include:

- 1. Mountain Pine Beetle Action Plans:** *The Committee supports current initiatives but proposes that a province-wide forest industrial strategy should be created (see notes below) to (a) provide coordinated regional planning and (b) coordinate the identification of ways to diversify and stabilize community economies during and after timber supply fall-downs.*
- 2. Timber Pricing and ‘Value-Slide’:** *Implement as soon as possible a market responsive timber pricing system to replace the existing Comparative Value Pricing (CVP) mechanism, which is no longer functional. Unlike the CVP system, the new system must recognize the market value of Crown timber and fully reflect any value deterioration in the quality of timber associated with MPB ‘value-slide’ impacts (see notes below).*
- 3. SPF Chip Surplus:** *Identify and implement innovative programs to find alternative uses and markets for the mounting surplus of SPF and other species pulp chips, and other residual fibre.*
- 4. Innovative Forms of Crown Tenure:** *Develop innovative forms of tenure that will attract long term private sector capital investment, and commensurate rewards, in area-based and other forms of tenure for forest renewal and higher levels of forest management on Crown forests in the BC Interior.*
- 5. New Investment and Secondary Processing:** *Develop an industrial strategy and investment attraction program for the secondary processing industry based not on resource driven policies (timber allocation), but on ‘market pull’ factors. This market-development focussed program should include small business and First Nations training in business and financial planning, marketing and engineering, along with expanded mechanisms for technology support.*
- 6. Non MPB Timber Stands:** *Allow logging of non-beetle infested Crown timber and species in order to supply value-added and specialty markets, including plywood and log home builders.*

Further aspects of these recommendations are provided in Sections 3, 4 and 5. In addition, the Committee recommends several other initiatives that are common to both the BC Interior and BC Coast. These are presented later in this section as ‘Province-Wide Initiatives’, and in Section 7.

BC Coast Industry

The key distinguishing feature of the BC Coast wood product industry is that, for a variety of reasons, *coastal firms have lost their ability of to adapt their business models to accommodate change, and are unable to attract new investment capital.*

This is ironic because, two decades ago, the BC Coast industry was a world leader in innovative wood product technologies.

BC’s leading firm at the time, MacMillan Bloedel (MB) researched and commercially developed ‘Aspenite’ wood panels along with numerous state-of-the-art engineered wood products, such as Parallam and LSL, or *TimberStrand*. Today, other regions have adopted the

Chart C





innovations that were first developed on the BC Coast. The ramifications have been huge.

'Aspenite' was developed by MB as a new generation structural panel to replace the region's declining plywood industry. Dwindling supplies of suitable peeler logs were a key driver behind this development strategy. Today, the OSB industry is a global, billion dollar industry. But the Coast's leadership has been lost progressively over the past twenty years.

Engineered wood products, developed by MB and also by Canfor Research, have revolutionized the North American home building industry. Wide span and high ceiling residential buildings, notably single family homes, have become possible. The BC Coast was a pioneer in developing structural beams from low cost sawmill residues and under-utilized roundwood. Load-bearing engineered wood products have allowed building codes to be re-written—worldwide.

Much of the leading-edge construction and many of the building materials used today worldwide depend on R&D and product innovations that were pioneered and patented on the BC Coast prior to its decline.

Twenty years ago, BC Coast firms pioneered many of the leading-edge building materials being used today, worldwide.

Chart D



Chart E

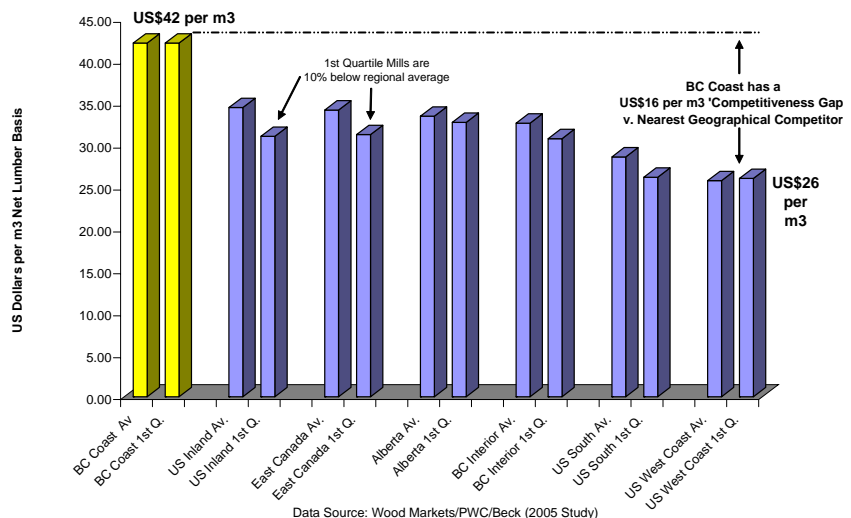


Chart F

Products invented by BC firms operating on the BC Coast spurred the subsequent development of, for example, I-Joists (Chart D), engineered flooring and roofing systems, and facilitated the rapid growth throughout the world of factory-based and off-site fabrication systems and site-built (Chart E) housing and industrial structures.

Despite this, today's BC Coast wood product industry is just a fraction of its former scale.

**BC Coast Lumber Manufacturing:
 Labour Costs are the Highest in North America**





The Coast sawmilling industry has been eclipsed by other supply regions. Over 95% of the world's capacity in the innovative wood products described above is located outside the BC Coast region.

The region's lumber industry is chronically unprofitable, and suffers from some of the highest production costs in the world. Its labour costs are the highest in the world (Chart F). The Coast's product mix is largely obsolete. Its mills are old, undersized and unproductive. Not surprisingly, capital has been moving out of the BC Coast region wood product industry.

The region's pulp and paper industry has not fared much better. It, too, is an innovative industry. But the average annual rate of return on capital employed (ROCE) over the past seven years for the region's leading pulp and paper firm⁴ is less than one percent (0.9%). The cost of capital, as already noted, is 10% to 13%. The Coast pulp and paper manufacturing industry is declining, and uneconomic mills have been closing over the past several years. More market pulp mill closures are expected.

Only one new sawmill has been built recently on the Coast—and no new pulp or paper mills. Pulp and paper CAPEX is well below the levels needed for a sustainably competitive industry (see Pulp and Paper IAC Report to the BC Competition Council). Most new investments carry a significant risk premium. Overall, the Coast forest sector is declining to consecutively lower and lower levels of critical mass—and is struggling to survive financially in the process.

What Led to the Coast's Decline?

In reality, it has been a combination of factors. No one issue can be singled out, but the combination of causes has led to a business climate on the BC Coast that was hostile to capital and where many stakeholders are still very resistant to change. Overall, there has been a chronic failure in the traditional P3 governing the Coast industry. Section 6 of this report describes the factors and chronology in greater detail. Essentially, the decline of the Coast primary wood products manufacturing sector is due to factors such as:

- ◆ Protracted and bitter land use conflicts;
- ◆ Unresolved land use issues and land claims;
- ◆ Excessive regulation and a hostile business climate;
- ◆ A flight of investment capital;
- ◆ Extremely high costs of production;
- ◆ Management-labour conflicts in the collective bargaining process;
- ◆ Very low levels of productivity;
- ◆ Stop-start ("lurch") logging in many areas;
- ◆ Permanent loss of traditional markets;
- ◆ Mills stuck with an obsolete product mix;
- ◆ Evolution in the Crown timber resource to less economic, lower quality trees and lesser valued species;
- ◆ Low priority on commercial issues by Crown-owned timberland administrators.

There have been other factors too. For the most part, management of Coast wood products firms did not adapt well or readily to these changes, for many of the reasons noted.

Although a culture of innovation prevailed in some firms, it was not widespread across the industry. On the Coast, when times were good, complacency set in. When major export lumber markets such as Japan were

⁴ Catalyst Paper Corporation, ROCE as reported by CIBC World Markets Equity Research Jan 09 2006, Page 3

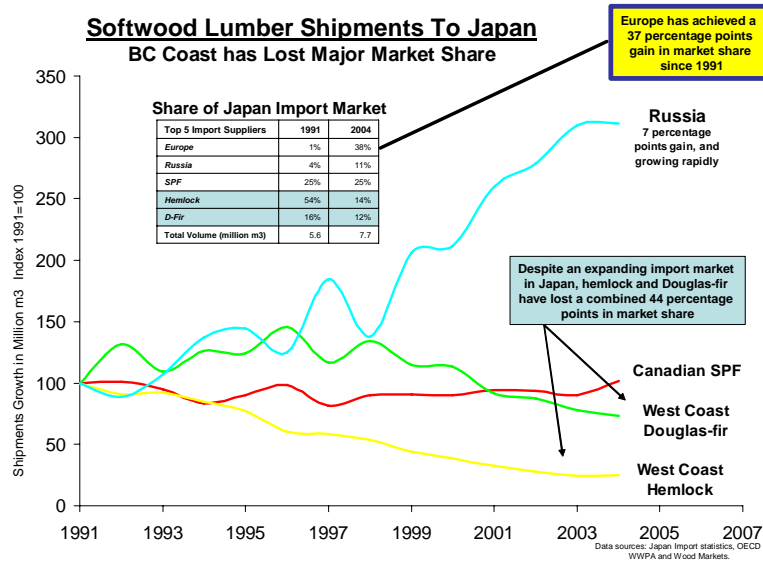


lost, companies became resigned to the loss. With an excess of conflicts among stakeholders, views about possible solutions to the Coast's problems among the three major players, government, labour and industry, became increasingly polarized and entrenched during the 1990s. For much of the past two decades, 19th Century management and labour attitudes have prevailed.

Loss of the Japanese Lumber Market

This was a gradual process. Market, currency and trade factors exacerbated the deterioration of the BC Coast wood product industry. Chart G shows that western producers of hemlock-balsam and Douglas-fir have lost 44 percentage points of market share since 1991. Yet, Japan's import lumber market grew over this period! Of critical importance competitively, Coast producers lost this market share to Russian and European suppliers (which offered better quality products for Japan's changing construction needs).

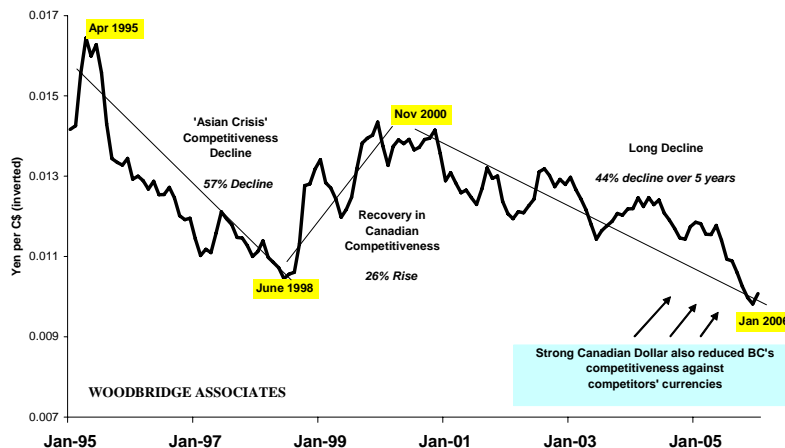
Chart G



Currency issues were a contributing factor (Chart H). In terms of lumber-equivalents, coastal North American firms have re-captured some part of this market, but through log exports (see Section 6)—much of which are from private lands.

Chart H

Currency-Induced Rise & Decline in BC's Competitiveness in Japanese Market





March 2003 Forest Revitalization Plan (Bill 28)

This brought about many vital and significant changes within the BC wood product industry's operating environment. It has been very beneficial legislation. It is equally applicable to all regions of the province. However, because of the sharp deterioration of the Coast industry contrasting starkly with capacity expansion in the Interior, the Plan probably has worked more advantageously for the Interior. Bill 28 measures are a necessary condition for change on the Coast. But the Plan by itself (coupled with market forces) has not been sufficient to bring about the magnitude of changes needed on the Coast.

Market-Based Pricing

As part of the *Forest Revitalization Plan* implementation, an expanded market-based pricing system was implemented on the BC Coast in January 2004 to provide a transaction-evidence-based *Market Pricing System* (MPS) mechanism. However, this needs further work to become effective.

What is the Outlook? — 3 Scenarios

The Committee has developed three scenarios that indicate possible outcomes for the BC Coast wood products manufacturing sector. They are:

Scenario #1 Continue "As Is". This has been dubbed the "*death by a thousand cuts*" scenario;

Scenario #2 Radical Change. With bold and radical changes, the Committee believes that a Coast industry turnaround can be achieved. A new manufacturing industry can be created;

Scenario #3 "Big Bang". Experience in several other jurisdictions shows that market forces ultimately will force a fundamental re-structuring of the forest economy. In practice, this has involved extensive mill closures and job losses (e.g. US Pacific Northwest wood industry P3 failure).

Scenario #1

If the industry continues on its current trend, BC Coast operating costs will remain uncompetitive, financial losses will continue and investment uncertainty will prevail. There will be further mill closures and job losses. As the Coast sawmilling industry downsizes, it falls below the critical mass required to support BC's pulp and paper sector.

There are many indications that the Coast industry is at this crossroads today. Further fragmentation of the Coast industry certainly will lead to further deterioration. Under this scenario, the prospects for the Coast to return to global competitiveness, based on existing business models, are not encouraging.

Scenario #2

Many assessments (see Section 6) have concluded that the Coast region has the resources to support a world class wood products manufacturing industry. Scenario #2 assumes that BC Coast stakeholders, ranging from industry to labour unions and government, will be willing to commit to a turnaround strategy.

The lessons from chronic failures of uncompetitive industries around the world suggests that, left to market forces, regions take a long time to recover once they have become fundamentally unattractive to investors. The turnaround strategy for the Coast assumes that, with pre-emptive action, this can be avoided.

Scenario #3

The factors that result in this scenario are largely out of the control of stakeholders in the BC Coast forest industry. The outcome is that public timber remains substantially underutilized, mills are shut, workers lose their jobs, families move away, communities suffer, the environment is put at risk and opportunities to bring social and economic benefits to the region are lost.

The US Pacific Northwest wood products manufacturing industry's P3 failure in the mid-1980s took nearly twenty years to resolve itself.

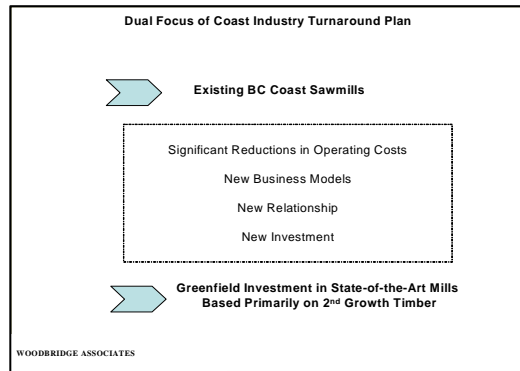
The Committee believes that this scenario on the BC Coast is avoidable and merits the radical changes outlined in the proposed *Turnaround Plan*.



BC Coast Industry Revitalization

The dual focus (Chart I) of the proposed coastal plan is to provide radical changes in the operating conditions for the existing industry, and to attract new investment capital into state-of-the-art sawmills based primarily on second growth timber, along the lines of the product-market strategies outlined above.

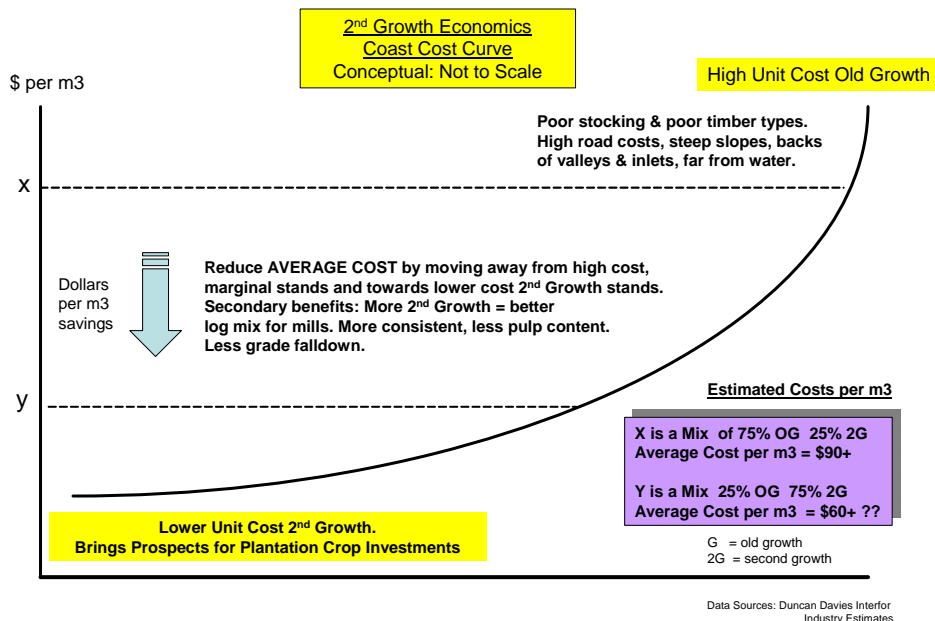
Chart I



An example of the economics of the business model based on exclusive harvesting of 2nd Growth timber are illustrated in Chart J. By shifting the mix of second growth and old growth timber over time, substantial financial and other benefits can be obtained.

Chart J

BC Coast: The Economics of 2nd Growth





Pace of Transition to Second Growth Crown Timber

Recent re-structuring of the BC Coast industry has involved substantial commitments of capital by new players, such as Brookfield Properties (formerly Brascan), well in excess of \$1 billion—in a single transaction. Western Forest Products (part of this group) subsequently has acquired Cascadia Forest Products (also part of the group), as part of a consolidation process on the Coast.

Western is developing a new coastal manufacturing model with a product-market focus focused on a mix of commodity products, value-added and higher specialty wood products production. This is linked to potentially expanded growth of value-added processing by independent small and medium scale businesses on the Coast (see Section 6 for further discussion).

Potential new investment will likely focus on greenfield new manufacturing plants based on second growth timber utilization and productivity investments in existing large log facilities.

This new industry will co-exist alongside the emerging new business model based principally on old growth Crown timber harvesting, being developed by Western and others.

Correspondingly, the *pace* of transition of the future Coast industry from its traditionally heavy dependence on old growth Crown timber to increased dependence on the processing of second growth Crown and private timber is an important issue to be resolved. It will depend on an array of factors. These include issues such as second growth timber availability, harvesting regimes, investment in new mills and economic transition. Economic fibre supply to BC's vital pulp and paper sector is a key issue to consider in this transition.

Future Investments, Rebuilding Critical Mass

The coastal wood products manufacturing industry has an opportunity to attract new capital into the region in several different ways. These are compatible, and each new investment would help reinforce the others. This opportunity should be viewed as a process of *rebuilding the critical mass* that is essential to bring the BC Coast forest industry (wood products and pulp-paper) back into global competitiveness.

The key means are:

- (A) Ensuring the conditions for a rejuvenated and recapitalized primary wood products manufacturing industry;
- (B) Attracting substantial investment into new greenfield state-of-the-art primary mills based on second growth Crown and private timber;
- (C) Expanding the role of independent small and medium scale secondary processing businesses (private firms, communities and First Nations groups) using old growth timber; and
- (D) Fostering new businesses based on higher utilization of existing high value coastal hardwoods, such as alder and Broadleaf maple, and attracting new investment into fast-growing hybrid hardwoods.

Global Growth in Timber Supply

Numerous reports and studies are readily available that document the various changes in global timber supply—which identify the rapid growth in low cost timber supplies worldwide. The coastal vision developed by the Committee affirms the potentially critical role of planted forest Crown and private timber to the future of the region. Correspondingly, BC's ability to produce a consistent supply of economically priced timber, and process it profitably, increasingly is driven by economics dictated by world markets.

Chart K shows a stand of high quality coastal second growth Crown timber (note the uniformity of size and flat terrain [low site], which are vital in planted forest and plantation-based wood manufacturing economics). Chart L shows a stand of hybrid poplars growing in the Fraser Valley. This is an 18-year old nursery stand. Trees from this plantation are harvested on a variety of rotations, but typically are cut every 10-12 years. It supplies fibre commercially to Scott Paper's mill in New Westminster. More generally, harvesting of old growth Crown timber will remain important to the economics of the Coast industry and coastal communities for many years to come. But, where profitable, 2nd growth and planted timber will be a future growth direction for the Coast forest sector.



Chart K



Chart L



Photo: Courtesy of Scott Paper

Committee's Recommendations for the BC Coast

The Committee's principal recommendation for the BC Coast wood products industry is that:

*The Industry should take primary responsibility for managing strategic and operational transitions in manufacturing activities located within the region through a **BC Coast Turnaround Plan**. The Government of BC should work with industry to ensure that the key initiatives defined below are achieved.*

Softwood Lumber Trade Negotiations

As noted earlier, this is one of the most urgent and substantial issues affecting the competitiveness of the BC lumber industry. It is discussed extensively in this report. However, as a national process is in place dealing with it, the Committee has not made any recommendations regarding this issue other than that a "US market access" filter should be applied to all government policy changes.

BC Coast Region Specific Initiatives

BC Coast Turnaround Plan

It is the fundamental view of the Committee that the priority focus for the coastal forest sector is creation of the financial and operational conditions necessary to attract new investment required to compete in the global forest products marketplace. It is estimated by the CFPA that over \$2.5 billion in new capital is required in investment to ensure a turnaround for the coastal wood products, and pulp and paper sectors.

However, the business case necessary to support capital investment does not exist today. Simply put, our uncompetitive position precludes meaningful investment in the sector. The recommendations included in the proposed B.C. Coast Turnaround Plan represent the industry's view on the key changes required to rectify the capital challenge, improve operational conditions and create the investment climate necessary to regain a competitive position.



Without these changes the coastal forest industry will continue its long decline with the attendant revenue reductions, employment loss and community disruption.

Key elements of the proposed Turnaround Plan include:

1. Land Use Certainty and Crown Forest Management

- 1.1. *Define and establish “competitiveness” criteria and apply them to the forest management regulatory framework, government administrative activities and land use planning to provide stable access to a market driven and economic timber supply required for the coastal forest sector to compete in the global wood and paper products marketplace. The result will be a dedicated industrial forest land base with a stable set of operating rules;*
- 1.2. *Expand the Forestry Revitalization Plan to make coastal B.C. a competitive forestry jurisdiction through further implementation of market driven policies, standards based approaches and regulatory simplification that streamlines government intervention and places a priority on enabling a vigorous, efficient and world competitive forest products processing industry in British Columbia;*
- 1.3. *Immediately implement a First Nations consultation and accommodation framework for forest based activities, based on current jurisprudence, which recognizes the Crown’s sovereignty, respects, recognizes and accommodates First Nations interests and provides the forest sector with timely and stable access to the AAC; and*
- 1.4. *Redefine the private-public-partnership between the coastal forest industry and the Ministry of Forests to create a positive and business oriented approach to the relationship.*

2. Reduce Coast Lumber Production Costs

The competitiveness gap in coastal lumber production is identified at US\$54/m³ (net lumber basis, 2004 data). Positive financial and operating conditions are a prerequisite to enabling industry to raise capital to invest in productivity and innovation. Actions required to eliminate the competitiveness gap include reduction of delivered wood costs; reduction of mill conversion costs; and introduction of tax incentives to attract capital investment.

- 2.1. **Reduce Delivered Wood Costs** *Actions to reduce delivered wood costs and improve the return to log across differing levels of harvest required to meet the industry’s weighted average cost of capital are:*
 - 2.1.1. *Update the Market Pricing System (MPS) to ensure that market forces determine stumpage and drive the timber pricing system;*
 - 2.1.2. *Conduct a review of the legislation, regulation and policy with a mandate to streamline procedures and remove regulation and policy that creates unnecessary operational costs or decreases competitiveness; and*
 - 2.1.3. *Continue and build on operational optimization, consolidation and cost reduction activities in woodlands operations.*
- 2.2. **Significantly Improve Coast Mill Conversion Costs** *Current mill conversion costs must be significantly improved in order to compete with first quartile mills in the Pacific Northwest - our direct competitor. Cost savings can be achieved through investments in productivity and innovation including the following:*
 - 2.2.1. *Encourage capital spending in new manufacturing equipment and technology for existing and new mills to increase productivity and lower unit costs;*
 - 2.2.2. *Implement measures and increase investments to improve workforce productivity and flexibility; and*
 - 2.2.3. *Establish a Coast Forest Industry Sector Council to oversee and enable fundamental progress on labour cost competitiveness. This broad based sectoral approach to labour cost reduction can facilitate commitment of all stakeholders to making the transition to globally competitive labour costs.*
- 2.3. **Taxation** *Government can play a vital role in enhancing the forest industry’s ability to attract investment through investment tax incentives and providing a competitive tax environment. A full*



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

review of the competitiveness of provincial and federal taxation policy should be undertaken including review of federal corporate income tax rates; capital cost allowance schedules; refundable investment tax credits or flow-through share tax credits; municipal taxes; provincial logging tax and provincial sales tax on business inputs (readers should refer to the Business Council of BC's report to the BC Competition Council for further details on tax reform).

3. Transition to Second Growth

Review the forest policy framework to ensure it encourages and supports a market driven transition to second growth harvesting. Market and product demand, delivered log cost pressures and changing age classes in the timber inventory are driving the transition from old growth harvest to second growth harvest and current policies must support with this transition.

4. Tenure Arrangements

4.1. Establish innovative new tenure arrangements that will encourage private investment in and entrepreneurial management of public lands. Pilot new competitively bid renewable long-term leases based on second and third growth harvesting from Crown controlled timber. Ensure that these new tenures are unencumbered from polices/regulations/legislation/agreements that do not exist in competing jurisdictions; and

4.2. To create certainty, required to raise capital and provide the Provincial government with flexibility to address changing land base priorities, "private property" type rights should be clarified and strengthened in existing timber harvesting tenure contracts. This will clearly delineate "up front" compensation in circumstances where the Crown takings erode licensee's contractual rights.

5. Notice 102

Exports of private land logs are part of the economic solution for the B.C. coast wood products industry, and are a factor in the ongoing softwood lumber trade dispute. All federal and provincial barriers to the export of logs from private lands should be removed immediately.

In recognition of this initiative, and to ensure a level playing field and consistency across Canada, the Federal and Provincial governments, must at a minimum insist that all lumber produced from private land logs be exempted from any form of border measure including the current countervailing duties (similar to the exemptions provided the Maritimes and Quebec border mills) as part of the Coast's progression to a full market based forest policy framework.

6. Community and Workforce Transition

Both levels of government should provide funding to communities and industry for community and workforce transition required to address the required coastal restructuring and rationalization that will result in closure of excess capacity in both the manufacturing and harvesting sectors.

7. Implementation of the Coastal Turnaround Plan

Industry and government must jointly appoint and empower (mandate) a "Coast Industry Advocate" to finalize the Turnaround Plan and implement the elements of the plan by 2008.

What Could the BC Coast 'New' Manufacturing Industry Look Like?

The Committee believes that, with radical but necessary changes, the BC Coast forest industry could achieve a successful turnaround—and could emerge as the next rapid growth area of the BC forest products manufacturing industry.

Part of the vision for renewal has been presented in previous documents⁵. One of the purposes of this report is to provide greater detail of this vision—and to propose a set of definitive steps for its achievement. The industry's vision is laid out in this report.

Innovative business models, substantial capital investment and a supportive P3 model of governance are some of the key factors required to bring this vision to a commercial reality.

⁵ For example 'Embracing a New Vision: Rebuilding BC's Coastal Forest Industry'. Also see Section 6.



For the BC Coast, ‘Catch Up’ Won’t be Enough

Sustained competitiveness will not be achieved in the ‘new’ model Coast manufacturing industry unless firms and stakeholders aim not just to ‘catch-up’ with key competitors, but to leap-frog beyond them. Strategic positioning for the Coast industry has to achieve a paradigm shift in product-market strategies. Many of these have been discussed within coastal BC firms. But, because of high risks and low potential returns, the industry has not acted on them so far.

‘Catching-up’ describes product-markets where BC Coast manufacturers seek to emulate the competition. Specifically, several coastal BC firms have considered the US Pacific Northwest (PNW) model. In brief, this focuses on the utilization of second and third growth hemlock and fir planted forests, as described above.

These forests yield comparatively small logs (but uniform in size and consistent in quality) to produce kiln-dried dimension lumber and other wood products in highly efficient mills selling to US markets. This is a valid manufacturing model for the BC Coast industry.

Moving Ahead of the Competition

The BC Coast industry turnaround will require a broad commitment from all stakeholders to the long view—and to a profitable manufacturing industry. Innovative product-market strategies will be required to position the Coast ahead of the competition. For example, key aspects of successful product-market strategies could include systems building—where Coast firms provide complete packages of building materials (whole “job packs” of structural materials), flooring, windows and doors, kitchen cabinets and millwork.

Some of these may be sourced from China, and new supply areas in Asia (e.g. Vietnam). But many can be made or further processed in BC. Alongside, the province can sell its extensive technical skills (design, engineering), marketing services (customization) and distribute full package products through channel partners.

Transportation will be a Competitive Factor

With many North American land transportation corridors and hubs (e.g. Chicago, Portland) becoming congested, and rising in cost, the BC Coast has a potential competitive advantage in sales to US markets using ocean freight modes, or multiple modes.

Break-bulk shipping which, for years, provided excellent transportation economics (and a competitive edge) for major forest product manufacturing coastal areas, such as Port Alberni, no longer can justify the large volumes needed to make these ports of call for break-bulk vessels.

This situation can be reversed, adding new jobs and community prosperity, with the re-building of the Coast industry. Containerized shipments of value-added wood products already are proceeding through Fraser Ports. Prince Rupert has significant potential as a distribution hub for the north Coast manufacturing zone.

US West Markets

Growth in North American demand for wood products is expected to remain healthy for at least the next several decades.

With some of the highest per capita consumption levels in the world, North American markets are huge—and potentially attractive to BC coastal wood products manufacturers.

Moreover, much of the growth in BC wood products exports has been to markets in the US West (Chart N). The BC Coast has a natural advantage in supplying US West markets—if the Coast industry can become cost competitive.

Chart M

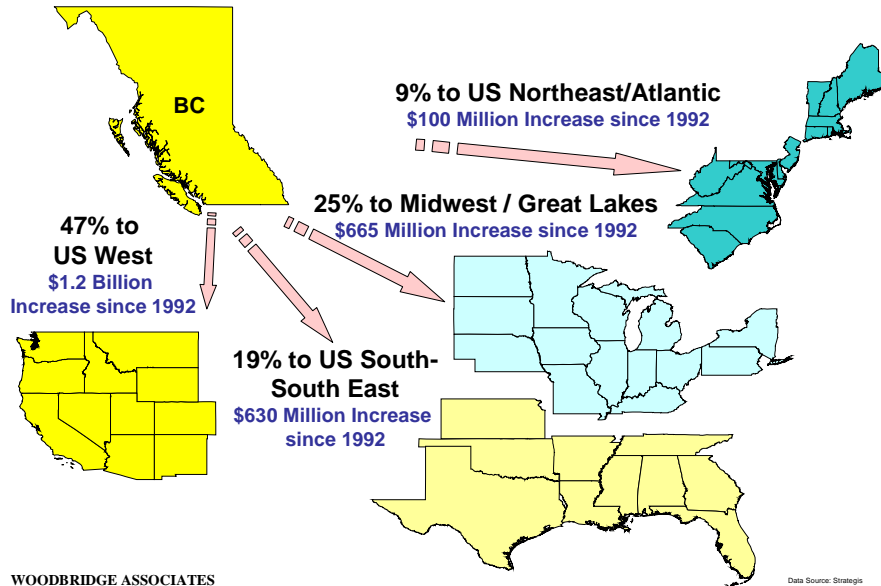




Chart N

U.S. Markets for BC's Wood Products Have Grown Rapidly

Total Shipments Value C\$6.8 BN in 2005



China and Pacific Rim Markets

Initiatives to develop alternative markets open up potential for two-way trade in resource-based and manufactured products, and opportunities for out-sourcing. Is China a competitor, or a potential customer? (Chart O). In the short term, Asian market demand for BC's products is limited, but growing. Promotional efforts are helping to develop higher per capita consumption levels for Canadian manufactured products (e.g. by assisting the development of a construction culture of timber-framed housing).

Chart O

North American firms have developed supply-chain relationships with Chinese manufacturers — improving the competitiveness of North American plants through out-sourcing.

Major western retailers have established distribution outlets in China, and locally source products that can be imported back to North America.

For the BC Coast wood product industry, loss of the Japanese market for its traditional products has been a major setback in developing its product mix. But Japan's import market is very large and, along with new markets in the Asia-Pacific Rim, remains as an opportunity for the 'new' Coast wood product industry.





Environmental Leadership

Forest products firms in BC and other Canadian provinces have invested heavily to achieve global leadership in certified forest management. From a trade and sales perspective, this is an important potential competitive advantage. BC has not acted strongly enough on this competitive advantage in its sales efforts.

Province-Wide Issues

In addition to the issues and detailed recommendations presented above for the BC Interior and BC Coast, a number of province-wide initiatives should be considered. These are discussed in Section 7. One the urgent and critical issues that must be addressed is the role of government in the forest sector.

Role of Government

Within BC, the Crown owns 95% of the province's timberlands. Utilization of Crown timber and the forest economy has been achieved primarily through a long-standing and successful public-private partnerships (P3s). By means of the 2003 *Forest Revitalization Plan*, the provincial government has made significant and beneficial changes to improve the operation of the province's P3s. Further changes are in progress, and more need to be made.

The Plan introduced new rules that have allowed industry firms to streamline their operations, to shut down uneconomic manufacturing capacity and to consolidate their operations—balancing timber with mills and markets. However, government administration of the Crown forest estate is not focused on ensuring the existence of a globally competitive, 1st quartile cost, expanding and profitable forest industry. In the Forest Act and ministry service plans, commercial forestry has been relegated to a low priority.

Almost 100% of the timber supply-chain is influenced by government regulatory and administrative practices. Inefficient government procedures add significantly to the industry's raw material costs.

In many government ministries, regional and district personnel do not always perceive commercial aspects of forestry as being part of their job. Many feel a stronger calling to other forest values. The pre-dominance of this type of administrative culture adds significantly to costs and causes significant delays to commercial operations.

This has to change if capital markets and shareholders are to be persuaded to invest the large capital sums required by the BC Coast manufacturing industry. Extensive costs have crept into the government's side of the P3, and these higher costs (which are often hidden) are passed through to the industry.

Chart P

The provincial government is involved in almost all stages of the stump-to-mill gate supply-chain economics.

Government-driven costs are incurred well before the tree is cut—through time-demanding land use decisions, extensive forest planning procedures, government and public consultations by harvesting firms and throughout the permitting process.

Moreover, these rules are not consistent from one district to another. In total, over many years, huge inefficiencies have crept into the province's system of Crown timber governance.

To assure and maintain BC's global cost competitiveness, significant



Photo: Woodbridge Associates Inc.



cost savings and substantially improved efficiencies will have to be found in all stages of the Crown timber and regulatory supply-chain up to the log yard (Chart P), and beyond. Fibre supply cost savings must be passed along to the industry, to help improve the province's competitiveness as a committed supplier to very demanding and price-conscious global markets.

Committee's Recommendations for Province-Wide Initiatives

1. Woodlands and Mill Safety: *Woodlands and mill safety is of paramount concern to the Industry. Several recent initiatives have been undertaken to address urgent issues relating to safety and to establish new higher standards of individual, company and contractor performance. The Committee considers these issues to be among the highest priorities addressed in this report and recommends that the goal of zero fatalities be adopted as a key component of the industry's standard practices.*

2. BC Timber Sales: *Carry out a third party independent review of BCTS, in collaboration with recently appointed new CEO, to clarify the mandate, goals, priorities and effectiveness of the organization from the viewpoints of (a) Crown timber allocation, and (b) creating an effective database for market pricing of Crown timber sales. The latter must take into account all market price signals, including instances of no-bids. The review should consider if a market responsive timber pricing system can be achieved through the BCTS, or a similar organization with a corporatized structure (e.g Crown corporation), or should recommend if some form of privatization should be considered.*

3. Ministry Goals & Priorities: Government Cost Creep 'Pass Through': Need for a Business Filter: *Ministry of Forests and Range staff attitude, accountability and the ministry culture prevailing in many instances are not in accordance with the Ministry of Forests Act which obliges the Ministry to "encourage a vigorous, efficient and world competitive timber processing industry in British Columbia."*

Government must apply a clear and transparent benefit-cost framework to our major policy, legislative and regulatory initiatives as they are developed. Industry should undertake cost benchmark studies on an on-going basis and present the results to government in a timely way. Government and industry at the executive level should meet on a semi-annual basis to assess progress on implementation of the competitive agenda. Government, as a top priority, should act on the new "results and performance-based" regulatory structure enshrined in the Forest and Range Practices Act.

The Government should identify a mechanism, and a specific point of responsibility within the provincial government, to install a business filter on government decisions impacting the sector. This should include identifying and eliminating the 'cost creep' that is a side-effect of many ministry decisions. More generally, the government should accelerate the pace of current actions already underway to bring about a cultural change in all government ministries' executive and staff dealings with the industry.

4. Streamline Barriers to Consolidation and Rationalization: *Remove all remaining barriers to exit, restrictions to consolidation and limitations to market-based rationalization of the BC forest products manufacturing industry, and negotiate the same with federal agencies to bring about a single-window provincially-led review and approval process.*

5. Community & First Nations Resource Dividend: *The Committee supports the broad intent of the Province's 'New Relationship' initiative and recommends that government should work carefully with the business community to implement this strategy. In the context of recent related financial commitments to First Nations, government should evaluate the concept of a resource dividend that would improve public and community awareness of the economic contributions of the forest sector, cultivate increased commitment to the industry's success and provide an alternative source of income (with offsetting reductions in property taxes) for local communities and First Nations. This revenue would be derived from direct taxes (stumpage) paid by the province's resource sector.*

6. Municipal Taxation: *The Committee received submissions and heard evidence that municipal taxes, specifically, are an increasing impediment to attracting new investment into large and medium scale industrial enterprises into British Columbia. The Wood Products IAC has worked closely with the Pulp and Paper IAC on this issue. Based on extensive research carried out by the Pulp and Paper IAC, the Wood Products Committee has reviewed the findings and fully endorses the Pulp and Paper IAC's recommendations. A letter has been sent to the BC Competition Council in support of these findings.*



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

7. Bio-Energy: *BC's forest sector, notably the province's pulp and paper sector, faces unprecedented off-shore competition from mills that are larger-scale and benefit from new technology that is driving low operating and energy rates. Provincial sales tax should no longer be applied to the cost of industrial electricity. BC is the only province in Canada to apply the full PST to industrial electric power purchases. Increased co-ordination and consistency of programs should be achieved between Federal and Provincial governments. The CCRA write-off rate should be increased to 100 percent to encourage all forms of biomass energy (capital equipment, installation). GST should be eliminated on energy-related investments, analyses and programs that are developed to meet the Kyoto targets. And improved accelerated capital cost allowances and incentives for projects should be undertaken to achieve greenhouse gas reduction.*

8. Labour Force & Skills Training: *The province should commit the resources and provide the political support necessary for the Industry Training Authority (ITA) to realize its vision of "British Columbians having affordable access to quality, responsive, integrated and accountable industry training that will meet the needs of industry and trainees/apprentices". The Committee endorses the Interior Forest Labour Relations Association's (IFLRA) recommendations that the ITA and industry sectors should have the capacity and resources necessary to support the smooth and timely transition to the envisioned industry-led system through the establishment of sector-based Industry Training Organizations (ITOs). The province should be prepared to stay the course. In other jurisdictions, it took time, resources, commitment and ongoing leadership to implement the changes and overcome the challenges.*

9. Market Development & Diversification: *The federal government should develop a focussed communications program aimed at politicians, other opinion leaders, US suppliers and customers. The purpose would be to provide facts about the Canadian forest industry and dispel the misconceptions created by the US lobbyists. This bi-national communications strategy should also have the goal of re-establishing good will with American consumers and the market position of Canadian producers.*

10. Value-Added Manufacturing Development: *The Province should establish a 'Forest Entrepreneur Program' to provide support to the value-added sector. This Program should take the form of training in the areas of business planning, financial planning, marketing, engineering and technological support. Formal recognition could be through an annual award ("Forest Entrepreneur Excellence") jointly presented by government and industry. In addition, the Province should appoint a 'supply coordinator' to facilitate a cultural change of cooperation between primary and secondary manufacturing.*

11. BC's Vital Pulp and Paper Sector: *The Wood Products Committee supports the recommendations made in the Pulp & Paper IAC report to the BC Competition Council.*



2: Follow-Up Steps

In this report, the Committee sets out its evaluation of many urgent issues that are having serious and potentially long-lasting impacts on the competitiveness of the BC wood products manufacturing industry. Accordingly, the Committee has made its recommendations to the BC Competition Council for action.

The recommendations call for an array of measures ranging from amendments to existing regulations to bold initiatives for radical structural changes. Both of the key regions of the province's wood products manufacturing industry face substantial challenges. So too does the province's vital pulp and paper sector, which has reported separately to the Council. Each sector requires, and merits, prompt and decisive action.

Many of the Committee's recommendations are unprecedented in the history of the hundred-year-old public-private partnership (P3) that is the foundation of the province's forest economy. Globally, strong competitors have won significant market share from BC in its traditional markets—and are poised to challenge BC for an even larger share of future markets.

Massive investments in productive capacity, infrastructure and in human resources are positioning these global competitors as price and quality leaders, in both manufactured goods and services. Terms of export trade are being shifted by many adverse factors outside the control of the province's forest industry. These include sky-rocketing energy costs, the rapidly appreciating Canadian dollar and punitive trade actions against Canadian producers. From many viewpoints, the province's forest sector is under heavy assault!

To be blunt, all stakeholders in BC's forest economy have to decide if they want to invest in a long term sustainable and profitable wood and forest products manufacturing industry in BC, or not. Without this commitment, there is little incentive for capital markets to fund the industry's future activities.

There is not much time left for further deliberation. Remedial actions in key parts of the BC forest economy will have to be agreed upon and will have to commence quickly—if the industry is to remain a global player in world trade. The alternatives have been described in this report. They are not good for BC, or for British Columbians.

The Committee has responded to the invitation from the BC Competition Council and has respected its request for two or three principal recommendations. Accordingly, the Committee is proposing a plan of action that:

- (1) Places the onus for action on the industry itself, and
- (2) Outlines two principal recommendations in the form of a *BC Coast Industry Turnaround Plan* and a *BC Interior Industry Transition Plan*.

The proposed plans address key issues facing these two regions. They define, respectively, two sets of strategic initiatives required to position both regions as sustainable, 1st quartile, globally competitive, growing and profitable manufacturers of innovative, knowledge-intensive wood products and services.

Immediate Follow-Up

Following the submission of this report to the Council, the Committee would appreciate the opportunity to make a presentation of key points—and have the opportunity to answer questions from Council members.

Forest Industry Stakeholders

The Committee believes that, in view of the urgency of the situation, other stakeholders should be given the opportunity to review this report as soon as it is authorized for public release by the Council. The report format is suitable for wide circulation. Extensive research has been provided. The Committee is anxious to develop a process through which the report can be discussed widely, and to establish a timetable for stakeholders to engage in a dialogue for collective action.

Our common goal is clear. The next step has to be a broadly-based willingness and commitment to take the appropriate action.



DETAILED REPORT



Section 3

BC Industry Profile



3. BC Industry Profile

Section 3 presents a profile of the BC wood products manufacturing sector. The aim is to provide the reader with some important background data to understanding the issues and recommendations made in the report. Section 4 identifies and evaluates the drivers of the sector's competitiveness, and discusses the current status of the long standing public private partnership (P3) that historically has been the foundation of the BC forest products industry.

Sections 5 and 6, respectively, provide a detailed assessment of the key competitiveness issues facing the BC Interior and BC Coast wood product industries. These sections also outline potential solutions, and present the Committee's recommendations.

BC Coast and BC Interior are Separate Industries

Although it is common to talk about "*the BC Wood Product Industry*", the reality is that, in most respects, there are two separate regional wood product manufacturing industries in the province. The BC Coast and BC Interior regions differ in topography, timber species, products, markets and in numerous aspects of competitiveness.

BC Coast: Currently, most firms operating in the BC Coast wood product industry are incurring significant financial losses. Many observers believe that the BC Coast region is chronically unprofitable. It is one of the world's highest cost producing areas in lumber manufacturing. Firms have been plagued in recent history by land-use conflicts, loss of market share, lack of access to alternative markets and a substantial level of investment uncertainty. With this loss of structural competitiveness, coastal sawmills are being shut, jobs are being lost and many skilled long term workers are unable to find alternative employment.

Improvements are being made (see below), but most observers agree that the competitiveness issues facing the BC Coast are substantially different from those of the BC Interior—and that the solutions for the coastal industry are also different.

BC Interior: The BC Interior wood product industry is not identical throughout all its regions. There are many important differences, for example, between the Prince George region and the Kootenays. But, generally speaking, it is a contiguous manufacturing region in the global context.

The BC Interior wood products manufacturing sector is dominated by SPF lumber production along with varying levels of secondary processing. Importantly, all SPF lumber producing regions in BC (just like sawmills on the BC Coast) depend very heavily for their income on the sale of residual by-product wood chips to the province's pulp and paper sector.

In contrast to wood products manufacturing on the BC Coast, the industry in the BC Interior region currently is one of the most cost-competitive lumber and oriented strand board (OSB) producers in the world. It has benefited from a recent surge in investment activity, in excess of \$1 Billion in mill upgradings.

The Interior region faces formidable competitiveness challenges—notably in battling the mountain pine beetle (MPB) epidemic and in maintaining access to US lumber markets. But overall, the business models that have worked for BC Interior firms still work today—with some important evolutionary changes.

March 2003 Forest Revitalization Plan

Structural changes have been made recently in the industry's operating environment—notably through the March 2003 Forest Revitalization Plan. This is a province-wide plan that is still being implemented. Thus, the Plan should be acknowledged as a 'work in progress'. Even so, the Plan has significantly improved operating and investment conditions throughout BC. It has removed many of the impediments to healthy market-based changes that existed.

BC Coast: The general consensus of the industry, and of the investment community, is that the magnitude of the challenges facing BC's coastal wood products manufacturing industry requires further significant changes in the Plan and in the model of governance (see below) relating to timber supply and pricing. Without these, and other changes, little or no new capital investment is likely to occur.

Without the investment, the coastal region will lose the opportunity to introduce some of the potentially successful private sector business models and technology solutions that otherwise could be implemented.



BC Interior: Most firms agree that further evolutionary changes will be required in the current model of governance (see below) and in existing business models. For example, innovative changes will be necessary in the post-MPB era for the region to maintain its global cost-competitiveness, and to find equitable, lasting solutions to the softwood lumber dispute.

The solutions required to resolve most of the remaining BC Interior region problems are either (a) already underway [e.g. shift to market-based timber pricing], or (b) within the scope of private sector firms—and the capital markets. These issues are explored further, later in this report.

Wood Products Manufacturing in BC

BC’s wood products manufacturing sector comprises various activities—primary conversion of logs through secondary processing of ‘value-added’ products. Major products manufactured include softwood lumber along with structural panels (OSB and plywood) and medium density fibreboard (MDF).

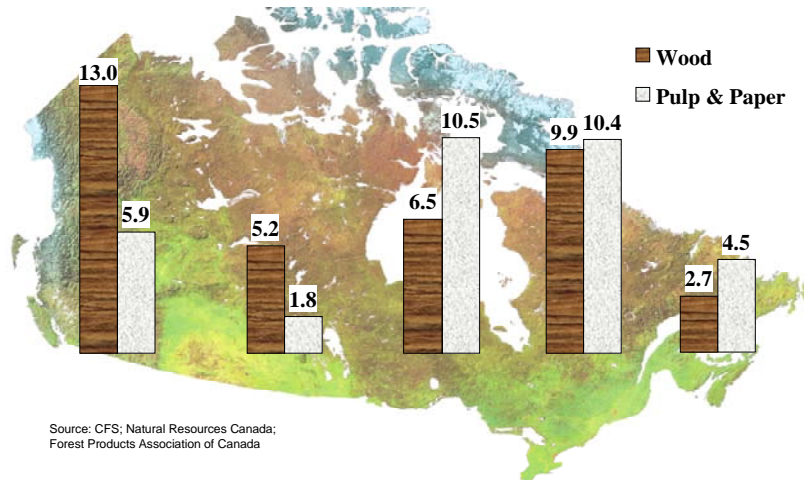
Some of these are further processed within BC into secondary wood products, including remanufactured lumber; engineered wood products; building components, factory-built housing, wood furniture, kitchen cabinets, windows and doors and a wide variety of millwork items, including mouldings and architectural woodwork. Important by-products include wood chips, sawdust, shavings and hog fuel. Chips are a vital raw material for pulp and paper production, while other residuals are used to make panelboards and bio-fuels (wood pellets) or are recovered in energy-cogeneration.

Global Significance

BC’s wood products manufacturing industry contributes significantly to Canada’s overall competitiveness in the global forest industry. In 2004, Canada shipped over \$70 Billion of products (Chart 1) from its mills, of which nearly \$45 Billion was exported. For Canada as a whole, nearly half of these exports were wood products.

Chart 1

Canada’s Forest Product Shipments = C\$70.5 Billion in 2004



Western Canadian production focused on wood products;
 Eastern Canadian mills, greater focus on pulp and paper



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

Canada is the world's largest exporter of forest products and ranks 1st globally in lumber and panels exports (Table 1).

Table 1
Canada Ranks #2 Globally in Wood Products Output, and #1 in Exports

	2004 Shipments (Billions \$)	2004 Exports (Billions \$)	2003 World Production Ranking (By Volume)	2003 World Export Ranking
All Forest Products	70.5	44.7		<i>1st</i>
Wood Products	37.4	22.0		
<i>Lumber</i>		<i>11.0</i>	<i>2nd</i>	<i>1st</i>
<i>Panels</i>		<i>5.4</i>	<i>3rd</i>	<i>1st</i>
Pulp & Paper	33.1	22.7		
<i>Pulp</i>		<i>7.2</i>	<i>2nd</i>	<i>1st</i>
<i>Newsprint</i>		<i>5.3</i>	<i>1st</i>	<i>1st</i>
<i>Printing & Writing</i>		<i>5.1</i>	<i>6th</i>	<i>3rd</i>

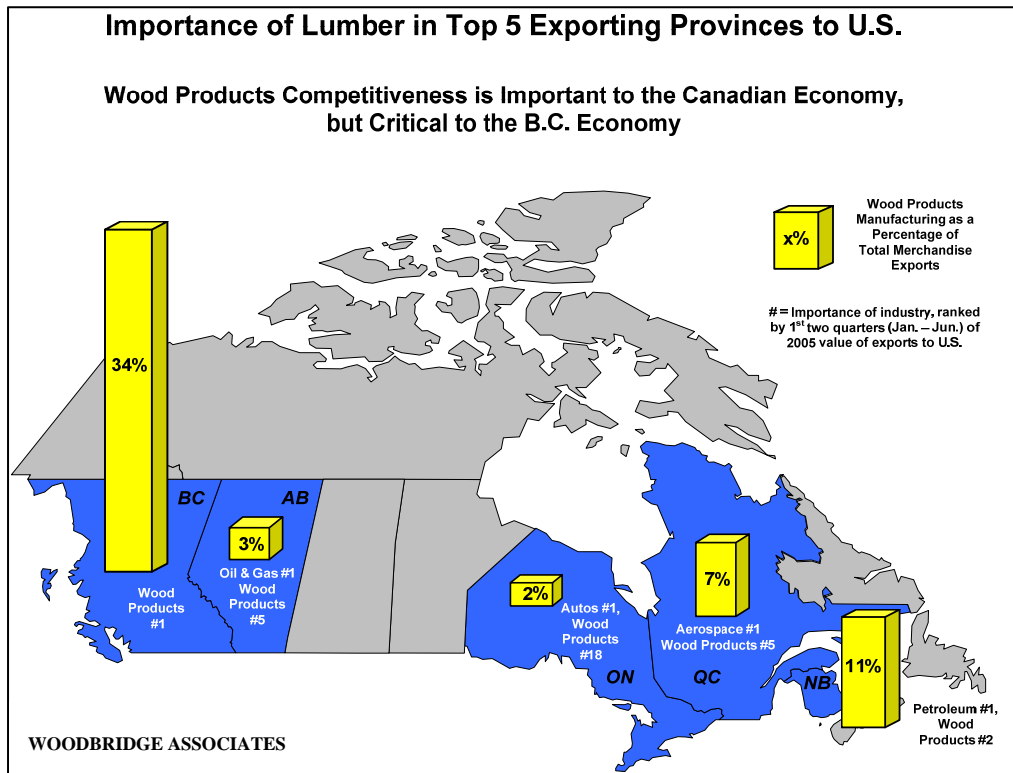
Source: Forest Products Association of Canada

BC's Forest Economy Differs from Other Parts of Canada

Within the Canadian industry, BC's forest sector has a dominant position. Within BC, the industry also has a more important role than in other provinces, as a contributor to the provincial economy. Chart 2 shows that while the automobile industry is Ontario's #1 industry, lumber shipments to the US account for only 2% of its merchandise exports. In Ontario, the wood product industry is a distant #18 in these exports.

Wood products manufacturing is comparatively more important in other provinces. But it is dominant in BC, where lumber shipments account for 34% of total merchandise exports to the US. The chart confirms that, while wood products competitiveness is important to the Canadian economy and in other provinces, it is of critical importance to the BC economy.

Chart 2



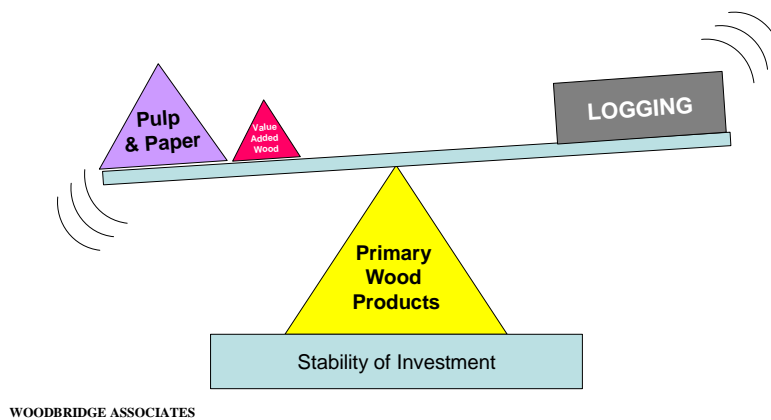


In contrast to all other parts of Canada, which are pulp and paper driven, BC's forest economy depends on the efficient and profitable conversion of logs into wood products as the first and principal manufacturing focus. In BC, wood products give the highest initial return to the log.

This is vital to any discussions of competitiveness because it means that, within BC, all other forest sector activities such as logging, value-added wood products manufacturing and pulp and paper sector each depend on the existence of a healthy and profitable primary wood products sector (Chart 3).

Chart 3

Logging, Value-Added Wood Products and Pulp and Paper Production in BC Depend on a Healthy and Profitable Primary Wood Products Sector

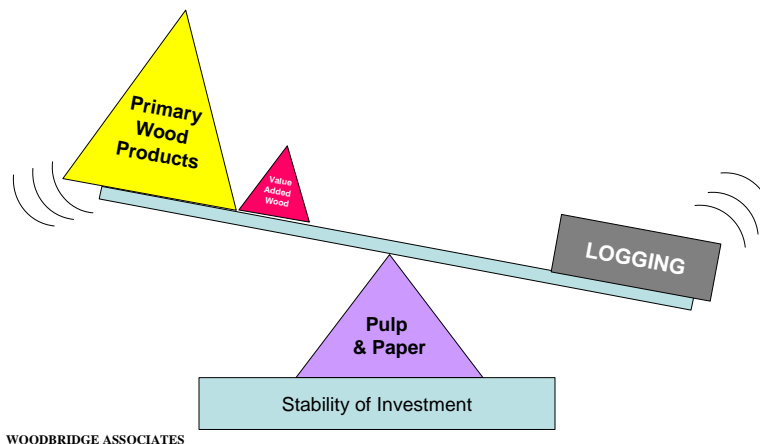


Interdependency

The industry is highly inter-dependent. The wood product industry in BC cannot function economically without having a healthy logging sector and a profitable pulp and paper sector (Chart 4). Each of these three sectors depends on the health and financial viability of the others. This point cannot be overstated.

Chart 4

But the Wood Products Sector also Depends on a Healthy and Profitable Pulp & Paper Sector !





Stability of Investment

As Charts 3 and 4 illustrate, stability of private sector investment is the solid foundation for all these activities. Investment inflows and outflows are influenced by a wide of factors, ranging from business climate to profit margins. They are discussed in more detail in the next section.

Logging

Without healthy and profitable forest products manufacturing activities, the viability of BC's logging sector is heavily at risk. Reduced commercial logging on the BC Coast, for example, already has had significant negative impacts on the economic sustainability of many forest-dependent communities, as well as on loggers, support services providers, First Nations and others.

Pulp and Paper

The pulp and paper industry depends heavily on residual fibre produced as a by-product by wood products manufacturing plants. It also has chipping plants to produce chips from roundwood (i.e. pulpwood). The BC Coast pulp and paper sector also imports specific types of residual fibre (e.g. hemlock chips) to meet its needs for particular fibre characteristics—notably in producing specialized grades of pulp and paper.

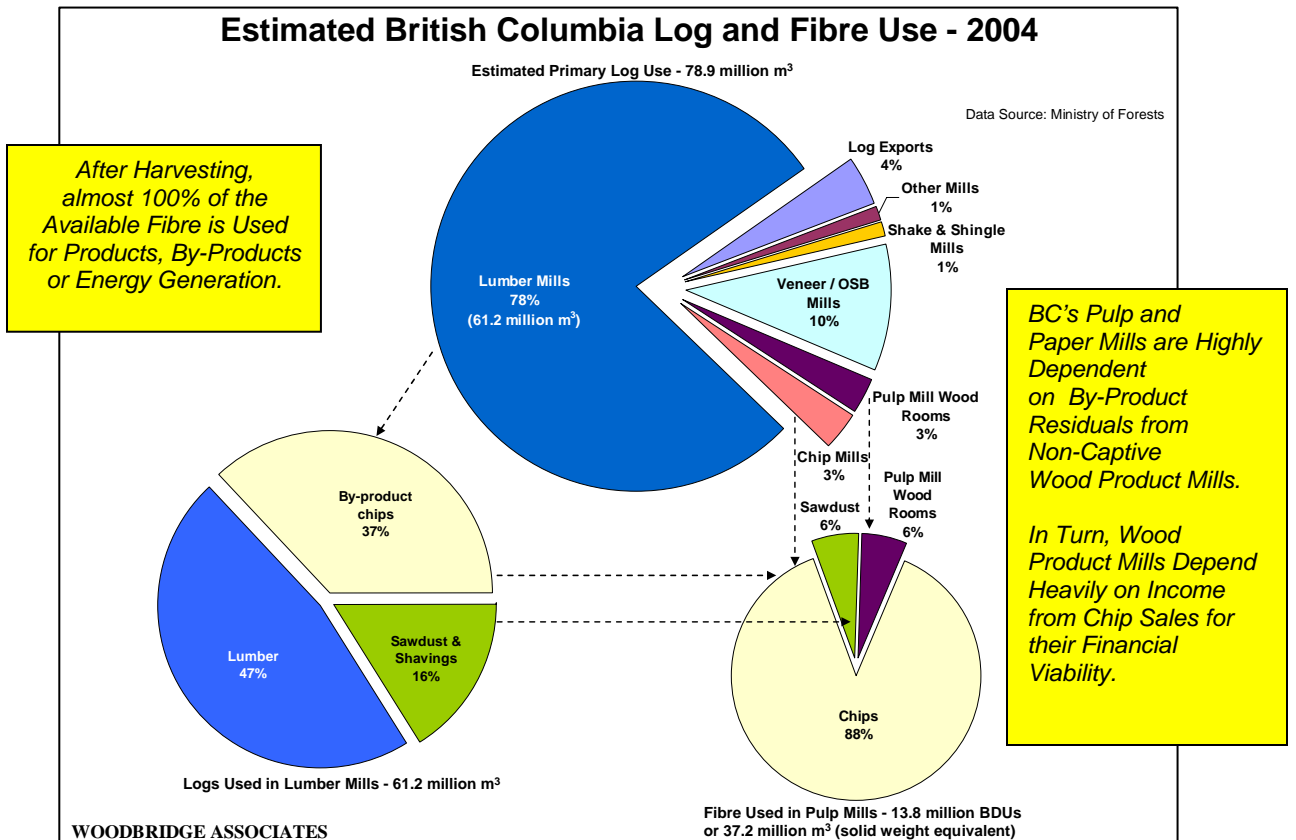
BC Has Created a Spider's Web of Sector Inter-Dependence

A significant part of BC's global competitiveness over many years, and many of the regional economic benefits enjoyed by rural and urban communities, can be attributed to the province's policy of encouraging investments in integrated forest sector operations.

Through vertical integration, considerable value is added to logging and harvesting activities in the manufacturing and distribution of forest products. By encouraging horizontal integration, BC has ensured that almost all available fibre is utilized by some form of manufacturing enterprise.

The goal of achieving sustainable levels of global competitiveness for BC's wood products manufacturing industry is vital for BC's economy, and has its foundation in profitable conversion by the primary industry.

Chart 5





Loss of Critical Mass

Historically, when the province's forest products manufacturing industries were expanding, tightly inter-dependent fibre-supply linkages between the various sectors provided a larger overall level of output and value-added production than could be otherwise achieved. As the overall sector expanded, each sub-sector gained competitive leverage from the other.

But it also created a high degree of financial inter-dependence and intra-dependence. Almost all commercial forest enterprises in BC depend for their income to some extent on others (Chart 5). Today, as the Coast sector downsizes to a smaller scale industry, old relationships are breaking apart. A new *stable* level of critical mass has to be found. To achieve this will involve costs, and sacrifices from all stakeholders.

The province's entire pulp and paper sector is vulnerable to this downsizing process. Its production economics depend on the even flow of high quality, low cost residual fibre from wood product mills.

With downsizing of the forest products industry, and elimination of older, less competitive capacity, throughout much of the developed world, dependent activities across the spectrum, from logging and value-added wood products to pulp, paper and secondary processing of paper and paperboard, become financially and economically vulnerable. The competitive edge gained from former close integration is lost.

Similarly, even though non-integrated wood product plants (such as furniture-making, factory-built housing, engineered wood products and laminated wood products) could purchase their raw materials from outside the province, they would lack the competitive leverage that a strong, healthy domestic primary wood products manufacturing sector can provide to these activities (see 'Clustering').

Wood Products Manufacturing: Impacts on the BC Provincial Economy

BC's logging and forest products manufacturing sector contributes significantly to the province's economy. Numerous studies have shown that, although the province's overall economy is far more diversified than many decades ago, forest products manufacturing activities remain vital to local and regional wealth creation in urban areas and in forest-dependent communities alike.

Some highlights from the COFI website include:

- BC's forest industry had sales of \$18 billion in 2004. Capital expenditures were \$850 million;
- Payments to government ranged from \$3.7 billion in 2004, representing 13.7% of consolidated revenue fund expenditures;
- More than 234,000 British Columbians, or 4% of the province's direct workforce, are employed by the forest industry;
- Average compensation in the forest industry was \$76,300 per person in 2004. This was 191% of the provincial average;
- Protected areas totaled 12 million hectares, or 12.6% of the province's forested land base.

Throughout BC, forestry-related and many non-dependent secondary processing activities (ranging from construction to furniture and residential cabinet manufacturing) have many substantial and irreplaceable beneficial economic and social side-impacts.

BC's Wood Product Sector: Product-Market Mix

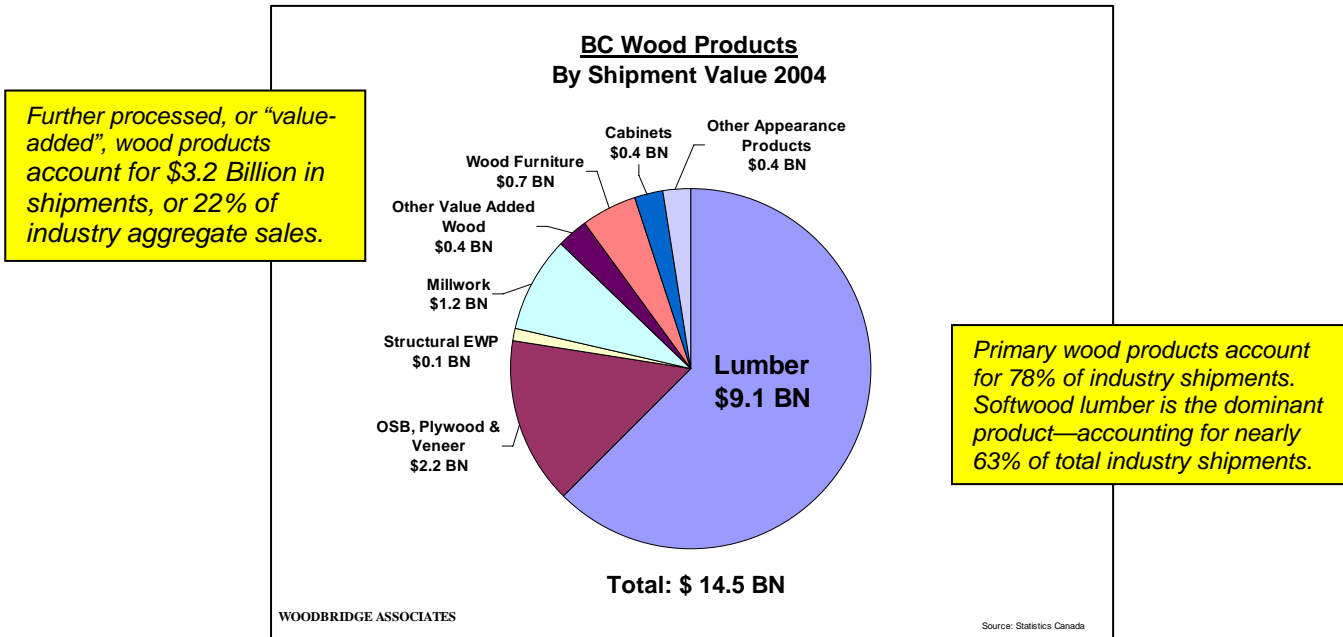
In 2004, BC's wood products manufacturing industry's product mix comprised large volumes of primary wood products—notably softwood lumber, hardwood and softwood OSB, softwood plywood and reconstituted boards—along with a much smaller volume of secondary processed products.

This product-mix (Chart 6) has evolved in response to its geographical location, market conditions and shifts in BC's changing timber profile and manufacturing costs. In 2004, shipments were valued at C\$14.5 Billion.⁶

⁶ This includes some wood products not shown earlier in Chart 1.



Chart 6



The dominance of softwood lumber in the province's wood products output is clearly evident. Lumber accounted for \$9.1 billion in sales in 2004.⁷, and represented nearly 63% of product shipments by value. The bulk of these shipments go to the United States market, followed by Japan and other offshore markets. Canada's domestic markets for lumber have been rising rapidly in response to buoyant residential construction rates in recent years.

BC's softwood plywood sector has stabilized after shrinking some years earlier. Recently, a surge in new investment in OSB plants in the BC Interior has helped re-establish BC as one of North America's principal supply areas for structural panelboards. In aggregate, this group of products accounted for around 15% of sector shipments.

A wide range of other wood products is produced in BC. These range from 'integrated with primary supply' products such as remanufactured lumber, building components and engineered lumber to 'non-integrated' wood-based secondary processing activities, such as factory-built housing, furniture and cabinet making.

The latter group of products does not necessarily depend on BC's primary wood product industry for its raw materials. But, as noted later, having a healthy primary wood products manufacturing sector in BC helps these value-added activities gain a competitive edge. In turn, they provide increasingly important local markets for many of BC's primary product manufacturers.

Primary Wood Products: Number of Plants

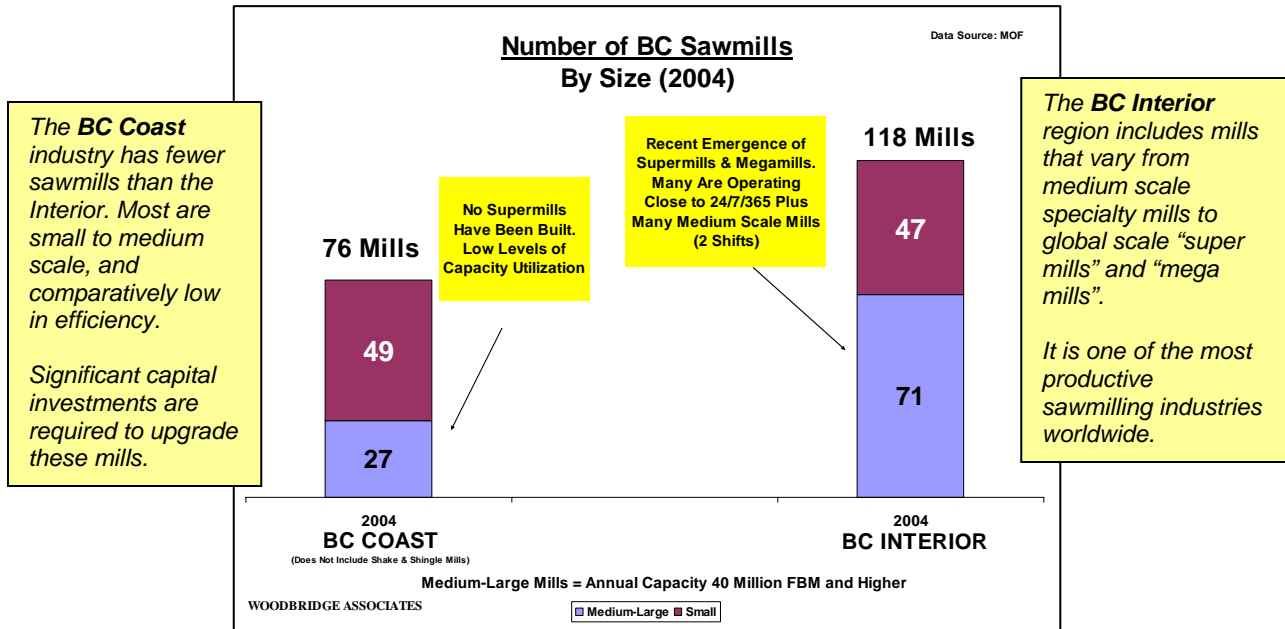
In 2004, there were 194 medium to large scale sawmills (Chart 7) operating in the province, along with several OSB, veneer and plywood mills, chipping plants, shake and shingle mills, and pole and post mills. Among publicly quoted firms, market capitalization levels typically range up to C\$3 billion. Extensive consolidation has taken place. There were 76 medium to large scale mills on the BC Coast in 2004 and 118 medium to large scale mills in the BC Interior in 2004.

BC Interior mills vary from medium scale, mid-level profitability, specialty product mills to global scale, highly efficient 1st quartile "super mills" and "mega mills". This region has one of the most productive sawmilling industries worldwide. The BC Coast industry has fewer sawmills. Most are small to medium scale and comparatively low in efficiency. Further discussion of BC Interior primary mills is provided in Section 5, and analysis of BC Coast primary mills is presented in Section 6.

⁷ PricewaterhouseCoopers estimated \$8.2 BN for 2004



Chart 7



Specialty Sawmills

A key part of BC's wood products manufacturing profile comprises mills that are able to cut for value and meet the customized needs of customers. These contrast with BC's supermills that focus on high volume, standardized "commodity" products. 'Tenured' larger and medium scale sawmills (i.e those with a Crown timber licence), and groups with several specialty mills, are located throughout the province from the Fraser River to the Kootenays, and from Prince George and Quesnel to Vancouver Island. Non-tenured mills are also located throughout these regions. Specialty mills vary in size from firms with up to \$5 million in sales per year to larger scale groups with sales in the \$50 million to \$150 million per year in sales.

The province's specialty wood product mills are a vital resource for value growth by the sector. They are innovative, able to cut for value from each log and meet the needs of a growing market for customized and semi-commodity wood products.

Secondary Processing of Wood Products

Further processed, or "value-added" wood product shipments in aggregate accounted for \$3.2 Billion, or about 22% by value of the sector's sales in 2004 (Chart 6). However, this is a highly fragmented sub-sector which comprises over 600 small to medium sized firms (\$10 million to \$200 million annual sales), and several hundred individually operated small shops.

The desire for increased levels of domestic processing of "value-added" wood products within BC led over the years to many interventionist initiatives by provincial governments. The distinction made above, between 'integrated with primary supply' and 'non-integrated' secondary processing activities, is fundamental to a proper understanding of the issues involved. It is important to remember that almost 100% of BC's wood products are utilized in some type of value-added activity.

The question of *where the secondary processing activities should take place (i.e. in BC or elsewhere)* should be defined by market needs and market factors. Ultimately, it depends on which secondary processing region can offer the most competitive supply and service.

Integrated with Primary Supply.

Primary-dependent secondary processors include re-manufacturers of a wide range of further processed products. There is a large group of these firms in BC and they account for a significant percentage of this sub-sector's total output. Typically, their plants are small scale and many are non-unionized.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

In comparison with some other Canadian provinces, such as Ontario and Quebec, and with other supply areas (such as Europe) that are located close to large consuming markets, BC's wood product industry has achieved only a comparatively low level of further processing.

Lumber Remanufacturers

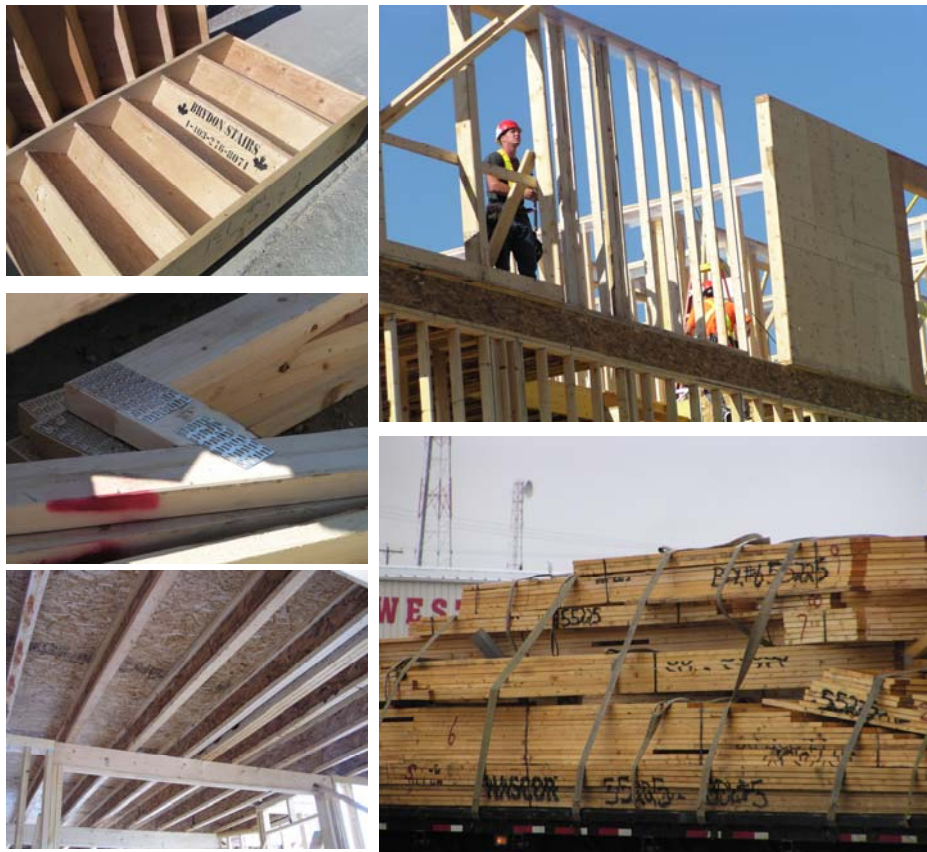
They produce products ranging from pallet stock and fence posts to architectural millwork and specialty lumber items, often on a fee-for-service basis. Using batch production techniques, and short-runs, they are able to produce higher valued products from raw materials purchased on a cash-basis from, or consigned to them by, primary mills.

This business has been undergoing significant changes. As a result of increased efficiencies and better grade recovery at primary lumber mills, many re-manufacturers have found that their traditional business has been shrinking. But there has also been some consolidation, and a few larger firms are emerging as significant suppliers to domestic and export markets.

Engineered Wood and Component Producers

This group also depends on primary mills for their raw materials supply. However, they tend to specialize in continuous production (versus batch production) of a specialized range of further processed and frequently engineered *structural* products—such as engineered wood finger-joint lumber, wall panels, roof trusses, staircase components (Chart 8) and log homes.

Chart 8



Photos: Woodbridge Associates Inc.

This is a growing group of firms in BC. Some, such as producers of engineered wood (e.g. laminated veneer lumber or LVL) are integrated with, or part of, large primary firms. Others are independent operators. Many of them have contractual raw materials and pricing-formula agreements with primary wood product mills. But others depend on open market spot purchases of raw materials.



Non-Integrated Secondary Processing

The other group—BC’s secondary processing wood product firms that are not heavily dependent on raw materials supply from the province’s primary wood product mills—are more numerous. They tend to make non-structural products where appearance characteristics are paramount— notably, wood furniture, kitchen and bathroom cabinets, millwork and windows and doors. But this group also includes manufacturers of factory-built housing, where structural and appearance wood products are used. Many serve local and domestic markets, while others ship their products overseas.

In BC, these comprise a large number of small shops and some larger well-known firms—many with a global reputation for quality and exceptional service. They derive raw materials from various sources, including BC mills, but their businesses are distinct from “the forest products sector” and are more closely aligned to retail markets, new construction and home-improvement markets. Examples of appearance, structural and architectural wood products manufactured by the BC wood product industry are illustrated in Chart 9.

Chart 9



Value-Added Public Policy

In the past, the desire to develop a more robust value-added wood processing sector in BC has led to significant adaptations of public policy—notably in Crown timber harvest licensing and tenure allocation. As BC’s forest sector evolves, it is clear that there are some important outstanding issues that need to be resolved relating to adequate supplies of raw materials to some secondary processing sub-sectors (e.g. log home manufacturers, laminated stock producers and other small scale individual businesses). However, most secondary processing of wood product enterprises do not benefit directly from direct linkages with standing timber resources, and these policies have been shown to have limited beneficial impacts on value-added wood products manufacturing development in BC.

Extensive Value-Added by the Primary Industry

Substantial value is being added to wood products produced by BC’s primary wood product industry. In some cases, this involves additional processing steps at primary mills or facilities within BC. Some of this value-added involves additional manufacturing steps. More and more, it involves providing value-added services to customers along the supply chain.

BC’s emerging competitive edge in value-added processing arises from its ability to service national accounts and global customers with a full package of products. This is more evident in the evolution of the BC Interior wood product industry than on the BC Coast to date. But the coastal industry has significant potential to expand into this role.



Importantly, there is immense scope for cooperative links in the future between small and medium scale businesses in BC (which offer unique production capabilities) to work together with larger firms that have established distribution links. Smaller firms are able to develop and market their products direct to customers, but distribute through larger scale BC primary firms that can provide one-stop shopping to national and international customers using their distributor networks.

BC's Primary Wood Products Manufacturers: Part of a Global Supply Chain

The bulk of BC's primary wood products are shipped to distributors, secondary processing plants and end-users in export markets. Most lumber and structural panels produced in BC are finished products, and are used by homebuilders and homeowners for construction purposes. In other cases, further processing may take place outside BC. In this context, BC has an important role in the global supply chain—as a supplier of primary wood products used or processed elsewhere.

Many of these markets are several thousand miles distant from BC mills of origin. Frequently, in order to provide the customized products that customers need quickly, and in the sizes and form needed, further processing plants have to be located close to end-use markets—often within a 100 mile radius of the customer.

Because of its distant location from most export markets, the formula that works best for BC is large scale production of low unit cost products, shipped in bulk to large scale distributors and consumers. Parts of BC's emerging secondary processing industry already are developing the types of links with primary firms that are noted above.

Clustering

In addition, competitiveness of the industry has been enhanced through recent high levels of CAPEX in the BC Interior region. This has boosted sales of industry suppliers, including equipment manufacturers and BC's buoyant technology sector firms. Overall, BC has built up a substantial network of local forest industry related firms. This clustering activity provides a multitude of benefits to the sector and to the provincial economy.

Domestic Market Growth Has Enhanced BC's Competitiveness

Recent rapid growth in the domestic demand for many wood products, notably building products, has also helped to enhance the competitiveness of the BC wood product industry. With a healthy and growing domestic market, notably as a 'test bed' for new innovative products, BC mills are better able to serve export markets competitively with an emerging range of innovative wood products.

BC's Primary Sector is an Extensive User of Technology

In 2004, BC's wood product industry invested \$850 million.⁸ in new mills, equipment and mill and plant upgrading. This does not include expenditures by secondary wood products processing plants. Plant expansions were made by several factory-based value-added plants across the province. Taking these into account, it is likely that nearly \$1 billion was spent by the widely-defined wood products manufacturing sector in 2004. Estimates indicate that the province's forest industry had total investments of over \$17 billion in woods operations, mills and related equipment in 2004.

BC's wood products sector spent over \$1 billion in new plant and equipment in 2004.

There is a prevailing image in some circles that the BC forest industry is a sunset industry. Nothing could be further from the truth! The BC Interior sawmilling industry, for instance, is recognized internationally as being the most efficient and technologically innovative sawmilling sector in the world.

The BC Interior sawmilling industry is recognized internationally as being the most efficient and technologically innovative sawmilling sector in the world!

Sections 5 and 6 provide numerous examples of the industry's innovativeness—not just in process equipment and manufacturing, but in woods technologies and many aspects of the supply chain.

⁸ Source: PricewaterhouseCoopers and COFI.



Technology Leadership: Global Competitiveness

However, technological leadership can never be reassured for very long. Many of BC’s competitors worldwide are also investing heavily in strategic positioning. In parts of the expanded European bloc, for example, a new sawmilling industry is emerging (often subsidized by governments seeking to create jobs in high unemployment areas). Super mills and mega mills producing high quality forest products are equally competitive with BC’s leading-edge mills and plants. Their products are aimed at the same very attractive markets that BC suppliers also covet—notably the United States and Japan.

In China, massive new capital investments are positioning the country as the fastest growing paper manufacturer worldwide. It is already in the ‘Top 3’ of furniture and other wood products manufacturers globally. Emerging major supplying regions elsewhere are also investing heavily in technology. But the purchase of technology offers no exclusivity to anyone. Ultimately, a competitive edge can be achieved only through low unit costs of production—and that means that productivity and the dedication of a well motivated, innovative and skilled workforce are the only sustainable means of sustaining 1st quartile supplier status.

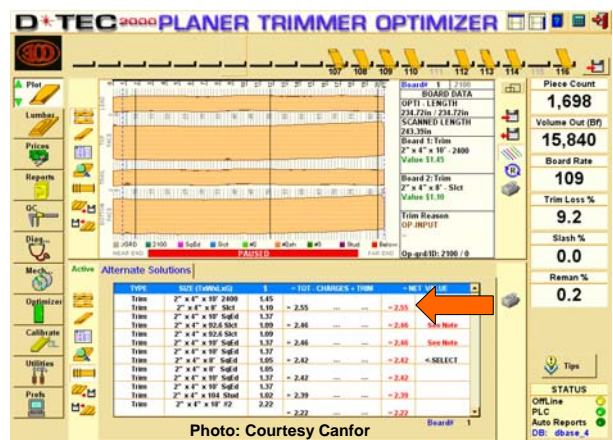
Advanced Manufacturing Technologies: Skilled Workforce

Over a quarter million (234,000⁹) persons, or 4% of the province’s direct workforce are employed by the forest industry. With induced employment the total rises to over 300,000 persons¹⁰. Many of these reside in forest dependent communities. BC’s advanced technology manufacturing facilities increasingly involve a mill workforce dominated by knowledge workers (Chart 10). Their jobs invariably require numerical ability and computer skills (Chart 11).

Chart 10



Chart 11



Increased focus by BC’s manufacturing firms on cutting for value, and serving the customized needs of large and smaller customers, requires a range of skills from product design and technical research through engineering and communications. The forest industry worldwide faces a growing shortage of skilled workers. BC’s future needs and skills training challenges are discussed in further detail in Sections 4 and 7.

BC is Pioneering New Supply-Chain Relationships

Globally, unprecedented changes are taking place in the wood products and building materials supply chain. This involves fundamental shifts in procurement and distribution relationships that have far reaching consequences for BC’s forest sector.

BC’s wood products are sold to a number of different types of end-users. In 2005, over 45% of lumber consumption in the United States went directly into new home construction and structures built off-site, including factory-built homes. Around 30% was sold to retailers and home centres (comprising ‘big box’ stores and independent yards). The balance of 25% went into various industrial uses, non-residential construction and packaging/transportation uses.

⁹ Source: COFI website
¹⁰ Source: PricewaterhouseCoopers



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

In retail distribution, consolidation in service points and home centres is readily associated in most peoples' minds with 'big box' firms such as Home Depot (Chart 12), Lowes, Kingfisher (B&Q and Castorama in Europe) and Hornbach in Germany. Extensive consolidation has been taking place too in wholesale and pro-dealer distribution dominated, for example, in the US by Stock Building (part of UK-based Wolseley), Rinker, Lanoga and Builders First Source. The field is complex, and many firms have developed integrated supply models. Masco (manufacture, sell, install) is a good example.

Among homebuilders worldwide, US firms have dominated the industry's consolidation to date. The 'Top 5' homebuilding 'giants'—Pulte, DR Horton, Lennar, Centex and KB Home—now account for over 10% of new starts.¹¹ The US homebuilding industry is highly fragmented with over 60,000 firms in the business.¹² in 2002. The degree of homebuilder consolidation in the US is expected to continue to rise. In Canada, many smaller sized firms dominate single family new residential construction, while larger firms have emerged in multi-family new housing.

Chart 12



Chart 13



Photos: Woodbridge Associates Inc.

BC forest product manufacturers are leaders in the development of supply chain relationships with major distributors and end users, such as homebuilders. Many of BC's larger SPF lumber producers dedicate some of their mills to special cutting programs for these markets. Chart 13 shows a consignment of lumber where each stick is bar-coded to a customer's specifications and brand name. Increasingly, some consignments use radio-frequency identification (RFID) chips for inventory and order tracking.

Through these new supply chain relationships, the term "value-added" takes on new dimensions. Vendors are expected to assume responsibility for managing inventory – vendor managed inventory (VMI—Chart 14) and sometimes provide other services, such as merchandising of their product in the buyer's home centres.

Technologies involving electronic data interchange (EDI) are widespread, and are used extensively to streamline the supply chain, optimize vendor and consumer inventory levels, link orders to manufacturing and just-in-time (JIT) delivery, and to eliminate avoidable costs.

These technologies and sawmill cutting-program relationships allow some facilities to manufacture a comparatively narrow range of products (e.g. specific lengths and sizes such as 12ft or 14 ft in 2x4, 2x6, 2x8 and 2x10), which allows full utilization of the mill's capacity and generates economies through optimization of log supply (e.g. through cut-to-length programs).

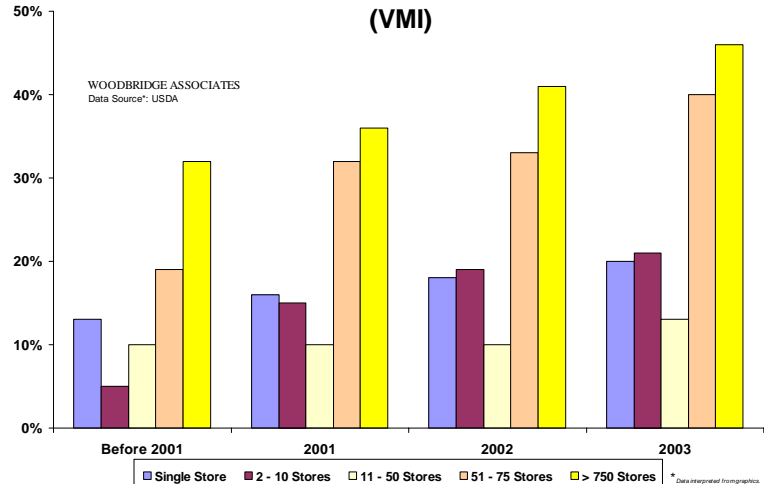
¹¹ www.housingzone.com

¹² www.census.com 2002 Census



Chart 14

More U.S. Stores are Sourcing Through 'National Accounts' and with Vendor Managed Inventory (VMI)



Facilitated by BC's recent *Forest Revitalization Plan* changes, consolidation in the BC Interior SPF lumber industry has aided the creation of manufacturing firms in BC of sufficient scale to serve the national account needs of many American distributors and end-users.

Buying power leverage has increased the competitive leverage of purchasers of BC's building materials.

The increased ability of BC manufacturers with large scale, low unit cost production facilities using a variety of supply chain technologies, has helped position the BC Interior region very competitively as a world class supplier.

Forest industry consolidation has resulted in an increasing number of BC-based head offices within the North American wood product industry.

Strategic Positioning for BC Firms

Some of BC's leading wood products firms are positioning themselves as global players, able to offer global sourcing to large national and international customers. Canfor, West Fraser and Interfor have mill and plant operations in the United States. The recent acquisition of New South Companies by Canfor heralds a new step in global positioning for BC firms. New South serves many of Canfor's markets in the US South East and Atlantic seaboard. New South sources a significant volume of its lumber and wood products from Europe.

Market Growth: Global Trade is Rising

Since the mid-1980s, there has been a surge in world trade in forest products—which has gained in intensity with trade liberalization and with more countries participating in international trade. In particular, substantial political and economic reforms have resulted in Russia and China respectively having a major impact on raw materials and finished manufactured wood products global trade.

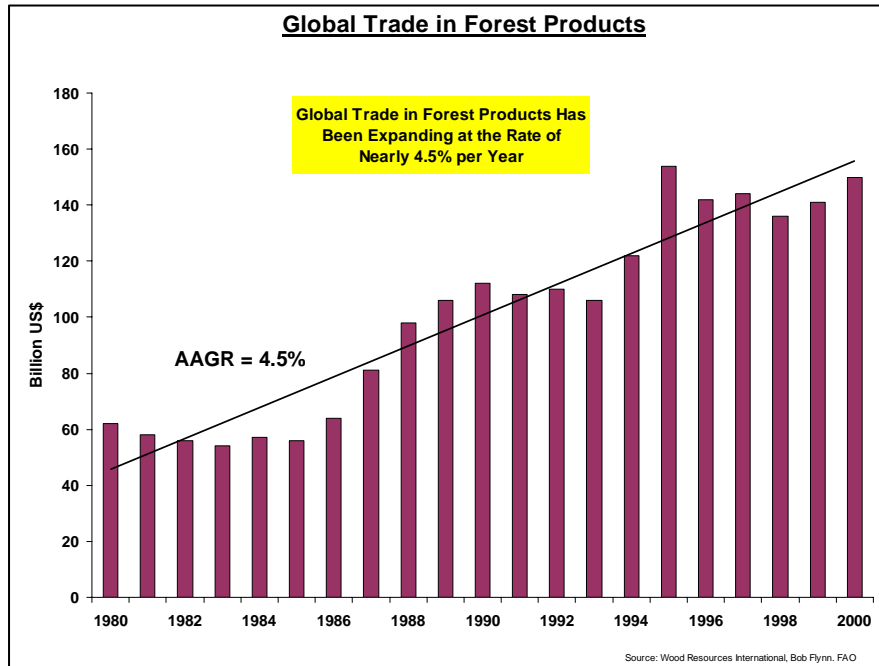
Chart 15 shows that global trade in forest products has increased at a 4.5% annual average growth rate. Studies show that per capita consumption of wood products is rising in many regions. Overall, global markets are becoming more competitive, with an increasing number of suppliers.

Worldwide, forest products manufacturing is a healthy growth business. Per capital consumption of forest products is very high in developed nations, but comparatively low in many developing countries. Moreover, wood and forest products have to compete with alternative materials and forms of communication. In the past, wood products generally have remained competitive against alternative technologies—such as steel, concrete and brick—in structural applications. The wood industry is highly productive and has developed many new products including performance composites (e.g. in laminated beams) and panelboards used in appearance products.

Provided that BC produces the right types of products, and specifically those in which it has a comparative advantage in trade, the market outlook for the province's manufacturing firms remains favourable. The future of BC's forest sector is not market-limited.



Chart 15



US Market

The United States is BC's most important customer for wood products. In 2005, the US imported an estimated C\$6.8 billion of wood products from British Columbia (Chart N, page 23). This compares with BC's total shipments of less than C\$3.3 billion in 1992.

BC has benefited substantially from its expanded trade relationship with the United States. But, in the context of significant trade frictions that have developed, associated with the US-Canada softwood lumber dispute, BC also has increased its dependency on the US market since FTA/NAFTA.

Chart 16 shows that the Canadian wood product industry as a whole increased its dependence on the US market from 68% of its exports in 1992 to around 89% in 2004.

US Import Market

BC is an important strategic supplier to the United States, which imports nearly US\$25 Billion in wood products every year (Chart 10).

Chart 16

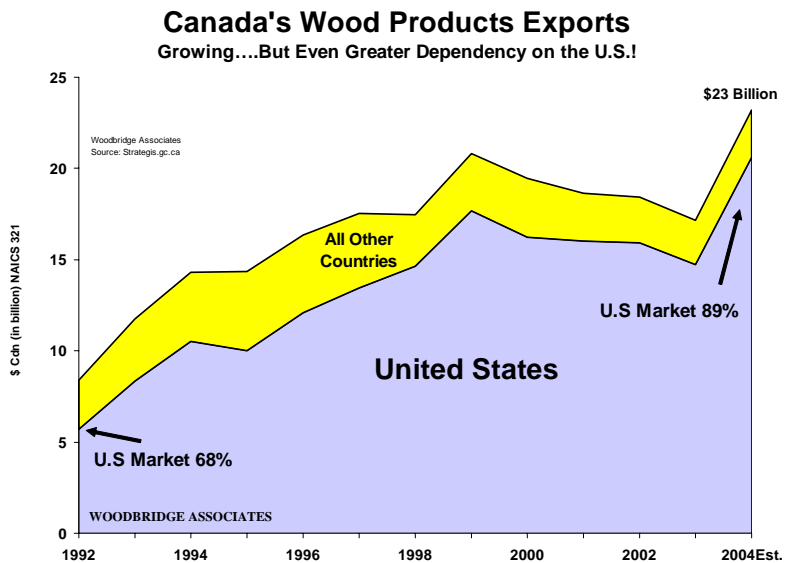
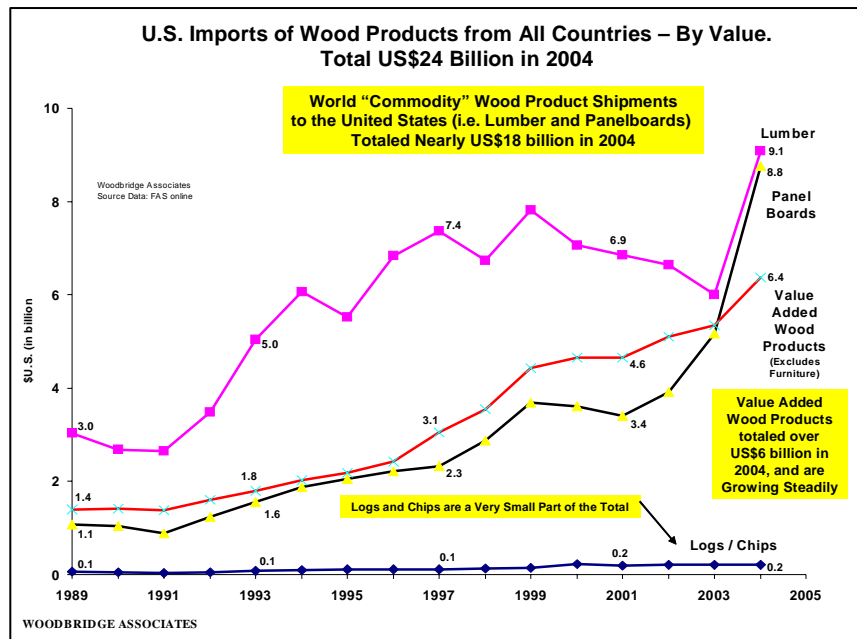




Chart 17



Canada’s Market Share in the United States

BC and other parts of Canada have a large share (greater than 30%) of the US market for many primary forest products, notably softwood lumber and OSB. Chart 17 shows that these products accounted for nearly three-quarters of all wood products imported by the United States in 2004.

But over a quarter of US imports are value-added wood products. The markets for these are steadily rising. US consumers are demanding more finished products but, at the same time, the US domestic manufacturing sector is less able to produce these value-added products as cheaply (and sometimes of the quality) provided by import suppliers.

Canada has a large share of US markets for commodity products, but its share US value-added wood product imports is very small –and declining.

Markets in Japan

Japan is BC’s second most important customer. In 2005, Japan imported an estimated C\$1.1 billion of wood products from BC – which accounted for the bulk of Canada’s wood product exports to Japan. However, BC and Canada wood products trade with Japan has been declining sharply.

The most significant initial decline occurred in the mid 1990s, as a result of the ‘Asian Crisis’ economic downturn. In 1996, BC’s wood product exports to Japan peaked at C\$2.8 billion.

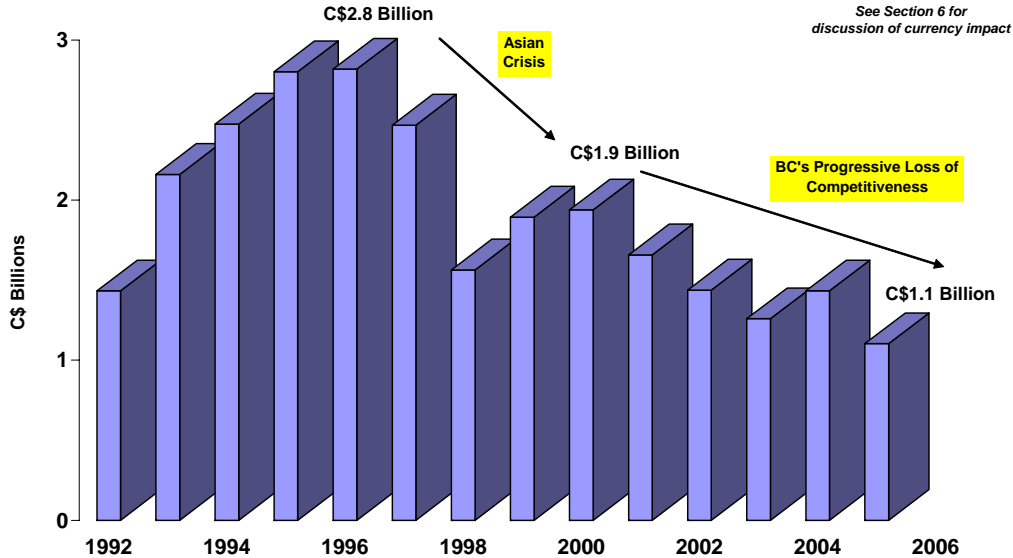
More recently, growth in Russian log exports, and BC’s loss of competitiveness against European and other suppliers in softwood lumber and engineered wood products, has accelerated BC’s loss of market share (see Section 6 for discussion of the BC coastal wood product industry’s substantial loss of market share in Japan). In 2005, BC’s wood products exports declined by an estimated 23% over 2004. There is a significant currency effect (C\$-Yen) involved also, which is discussed in that section.

Chart 18 shows the declining value of BC’s wood products exports to Japan since the mid-1990s. This represents a serious loss of sales revenues. Japan accounted for 30% of BC’s total export market revenues in 1996. By 2005, this had declined to 13%.



Chart 18

BC's Wood Products Exports to Japan (by Value)



WOODBRIIDGE ASSOCIATES

Data source: Strategis

BC's Market Diversification

Trade constraints imposed by the United States on Canadian wood product imports are one of the reasons that Canadian provinces have been actively seeking alternative markets for their products. Federal and provincial agencies have cooperated in initiating trade missions to many emerging overseas markets, such as China and India.

Several of BC's leading wood products producers, such as Canfor, are actively involved in developing offshore markets for wood products. In addition, many of BC's leading post-secondary skills training providers, such as BCIT, are well established in providing support services. These efforts are helping to expand the per capita consumption of wood products and to promote the demand for BC products.

However, as noted above, BC's loss of market share in its second largest market (Japan) also is of considerable concern. The significance has been masked recently by comparatively buoyant sales of BC wood products to domestic markets. A boom in construction expenditures, earlier in Ontario but more recently in BC and Alberta, has diverted some of BC coastal and BC Interior excess capacity away from export markets. As domestic markets cool, the full extent of BC's loss of its offshore markets will become apparent.

China

China imported an estimated \$68 million of BC's wood products in 2005. This was equivalent to less than 1% of BC's export sales revenues.

India

India is a very small market for BC's exports, accounting for less than one million dollars of sales in 2005.

Other Markets

Including China and India, these accounted for less than 7% of BC's wood product export revenues in 2004.



Section 4

Drivers of Competitiveness



4. Drivers of Competitiveness

The competitiveness of a firm or industry sector is defined by a large number of variables. Low production costs are a key factor. 1st quartile mills, on a global scale of comparison, can also be the most competitive. However, unfavourable currency changes can quickly eat away at the competitive edge of otherwise very productive mills.

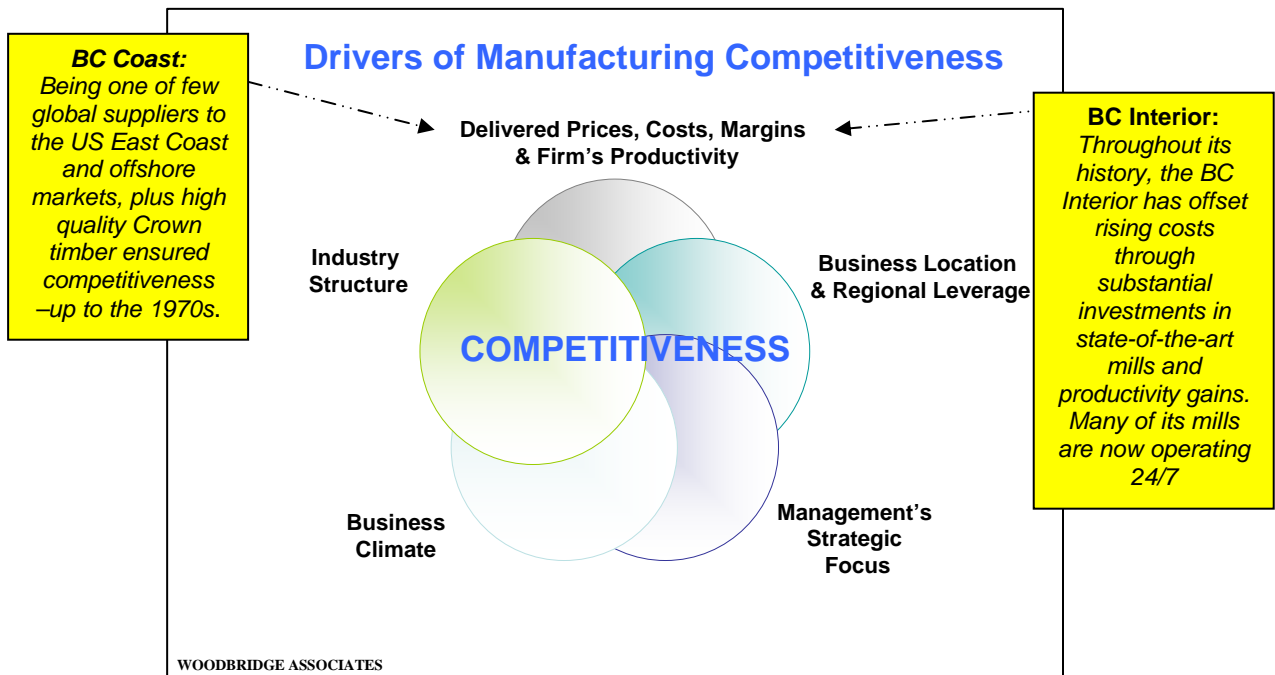
Shifts in exchange rates are a key variable for export market dependent countries, such as Canada. In the past five years, the rising value of the Canadian dollar in terms of several currencies has led to a significant loss of the country's forest sector competitiveness.

Business climate is another key driver. A region that enjoys low production costs, for example, may suffer from a poor investment climate. Global capital markets may consider risks too high to invest in capacity expansions in that region—or place a high risk premium on it. High or rapid rates of increase in direct and indirect taxes, along with excessive regulation, can deter investment and reduce regional competitiveness.

Closeness to markets, which often gives manufacturers the ability to provide prompt service and just-in-time delivery, can offset lower levels of productivity and higher costs for that mill or plant. The structure of an industry is also important. In very competitive global commodity markets, no supplying regions have pricing power. But, in an industry where there are few players, supply discipline may provide a competitive edge against other products.

Product differentiation and branding can also help achieve a competitive edge. Management's strategic focus is a key driver. The inability to attract skilled trades, key line managers and top performing senior management can also affect a firm's ability to compete. The competitiveness model¹³ shown in Chart 19 indicates that there are five principal drivers of manufacturing competitiveness. Each of these five comprises a significant number of sub-variables that can be quantified and ranked in importance. Drivers and sub-variables will differ for different firms and regions. Typically, they shift over time—enhancing or detracting from a firm's or region's competitiveness.

Chart 19



¹³ Woodbridge Associates Inc. *Manufacturing Competitiveness Model* used with permission. See www.woodbridgeassociates.com for further information on the model and its applications.



Delivered Prices, Costs, Margins and Firm's Productivity

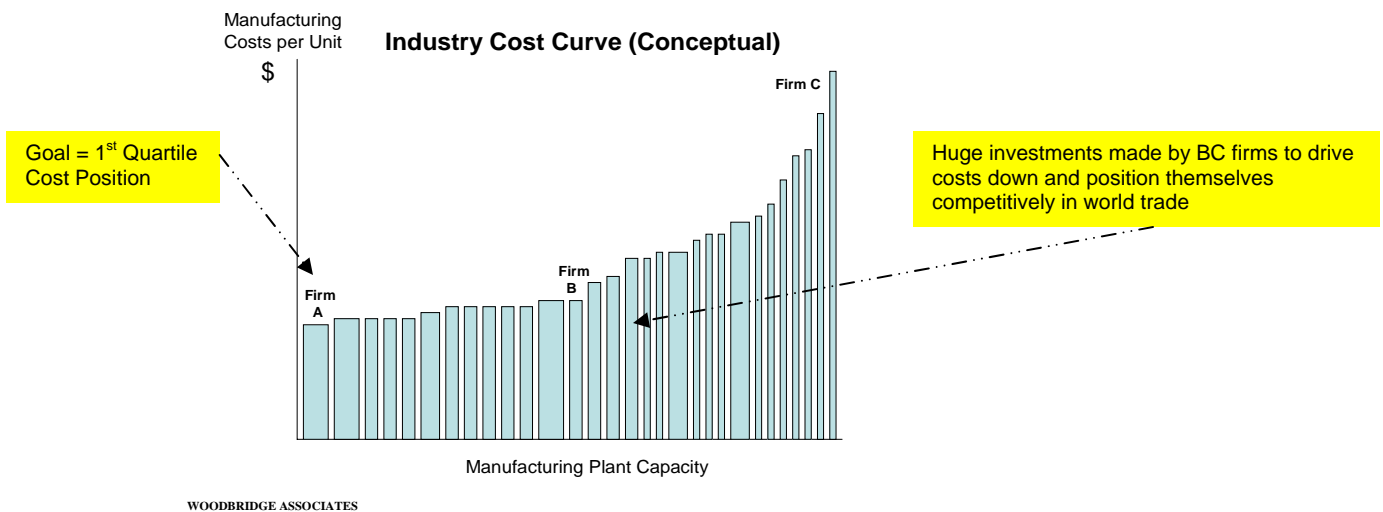
This is the most important overall driver that defines competitiveness.

Delivered Prices

Delivered prices are what the customer pays. Analysts frequently talk about average “lumber prices”. In fact, these prices accumulate “value-added” along the manufacturing and distribution chain, and they can vary significantly from the average. A supplier in the US, albeit with higher production costs, may meet a local buyer’s inventory shortfall. Spot prices differ from longer term contract volumes linked with program sales. Do high spot market prices render a manufacturer uncompetitive? Not necessarily!

The acid test of competitiveness on a daily basis starts with requirement that a producer should to be a price competitive seller. Service and other factors can help position manufacturing firms competitively, but unit costs of production ultimately have to be competitive.

Chart 20



Production Costs

Low production costs yield a fundamental competitive advantage, but adjustments have to be made for quality differences. Many buyers of a region’s plywood and lumber, for example, are willing to pay a price premium for a particular mill’s brand—even though the mill’s production costs may be higher than market averages. For sustainable global competitiveness, companies have to strive constantly (24 hours per day, 7 days per week) towards being the lowest cost producer (Firm A, in Chart 20). This global 1st quartile position is discussed throughout the report.

Productivity

High levels of productivity are a route to achieving lower unit costs of production. Low and/or inconsistent levels of productivity in a labour-intensive mill, along with other high fixed costs, may force a firm to automate its operations. High and ongoing levels of productivity gains can help offset rising factor costs. Do high factor costs inevitably render a manufacturer uncompetitive? Not always! Intensive use of capital, along with economies of scale, can displace high cost labour and offset skills shortages.

Margins

Profit levels and profitability are vital indicators to shareholders and providers of capital. Without an adequate discounted rate of return on capital invested, capital markets restrict access to, and possibly withdraw, debt capital and operating loans. Shareholders who receive an inadequate return, in terms of share price appreciation and/or dividends, may also withdraw funds. The inability to raise capital for productivity-gain investments, new product development or capacity expansion can quickly hamper a firm’s competitiveness.



Business Location and Regional Leverage

These can have a significant effect on competitiveness. They comprise a number of sub-variables where local, regional or national attributes of competitiveness play a role (e.g. existence of a large pool of unemployed skilled workers).

Location

The location of a business in relation to its customers or key distributors has an impact on competitiveness. Apart from differentials in the costs of transportation from mill to customer, delivery time may be a factor. Typical delivery times of lumber shipped from Prince George to the US South East may exceed 15 days. A local wholesaler, responding to an urgent spot market purchase order, may be better placed competitively to deliver the product—even at a higher delivered price.

Many manufacturers are able to overcome their location disadvantages (and perhaps avoid labour strike impacts) through warehousing of inventory close to markets (distribution centres) and by out-sourcing purchases of certain key items to lower cost and more reliable suppliers, or ones who can supply products or grades they cannot provide.

In other instances, buyers may pay a price premium for quick service and the ability of an otherwise higher priced vendor to respond to the need for local service calls.

Regional Leverage

This comprises a number of competitive positioning variables, ranging from the competitive edge provided by exchange rate differentials, to enhanced levels of service made possible by the existence of an experienced service or R&D staff with in-depth knowledge of a product's performance attributes. Clustering of similar operations can also provide a firm with regional leverage. For example, high wood costs and high labour costs in Italy and Denmark (the world's Top 2 producers of fine wood furniture) are offset by the unique skilled craftsmanship of these regions, and the regional leverage obtained from industrial clusters.

Other Drivers

These have been described briefly, above.

What Factors Defined BC Historical Competitiveness?

Several factors under-pinned BC's historically global competitive position in wood products manufacturing. These include:

- Plentiful supplies of high quality timber;
- BC was one of few global suppliers;
- Coastal mills had access to tidewater;
- Rapidly growing markets existed in the United States;
- BC was able to develop large scale mills, with economies of scale that yielded low unit costs;
- Integrated manufacturing generated economies of scale and logistics in outbound transportation;
- Private sector capital teamed-up with a model of timber supply governance that rewarded investors.

In the early days of the BC coastal industry's development, all five drivers were favorable to attracting rising levels of investment in wood product manufacturing. Managements focused their business models on larger scale efficient manufacturing, investing heavily in equipment and logistics that yielded the highest outturn of solid wood products (i.e. lumber recovery [LRFs]) and horizontal integration (using residuals for producing particleboard and/or wood chips in captive pulp and paper facilities). Douglas-fir plywood (DFP) was a major growth industry in BC while supplies of old growth large logs existed on the Coast.

In the early 1960s, BC Interior mills introduced new high speed technologies to produce large volumes of kiln dried lumber, and Canadian softwood plywood (CSP) from smaller sized logs. But the development model was essentially the same.



P3 Relationships (Industry Structure)

Although plentiful supplies of high quality timber were available in the early to mid-stages of the development of the BC forest products industry (starting in the 1880s), few roads and very little physical infrastructure existed. Thus, the *economically available* supply of timber was limited.

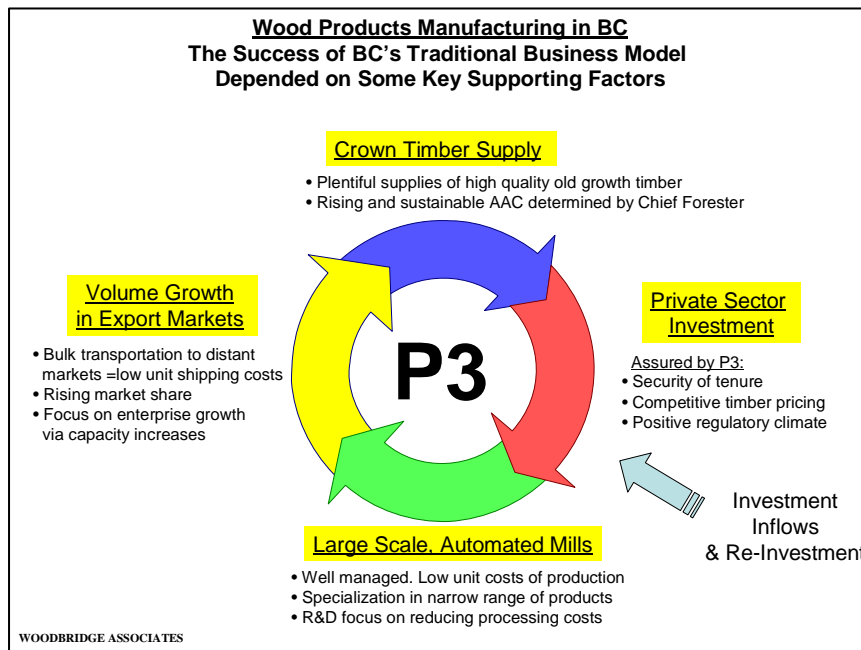
With a massive underdeveloped land area (1.4 times the size of Texas—the largest US state), and 95% public ownership of the province’s timber, BC public policies relating to timber allocation and pricing subsequently focused on a P3 (public-private partnership) approach to bringing about desired levels of economic development (Chart 21). This had many aspects. The most important of these, from the viewpoint of addressing global competitiveness, was the ability of the P3 approach to combine a system of public timber governance with various business models that attracted private capital in logging and manufacturing activities.

BC Forest Sector Traditional Business Model (Industry Structure)

Chart 21 provides a schematic of the principal business model that traditionally has driven the BC forest products manufacturing economy. The P3 model of Crown timber supply coupled with private sector capital investment facilitated the construction of large scale, highly automated and very efficient wood products manufacturing plants throughout the province.

Coupled with the development of bulk transportation facilities, this resulted in BC firms capturing a growing market share in export markets. A similar approach was taken in other Canadian provinces where publicly owned (Crown) timber accounts for a large part of the total timber harvest.

Chart 21



BC’s Competitiveness in 2006

For many years, the P3 model worked well throughout British Columbia’s forest sector. For various reasons, it is no longer working well for the BC coastal wood products manufacturing industry. The structural causes and some potential solutions are discussed in Section 4, and below.



BC Coast:

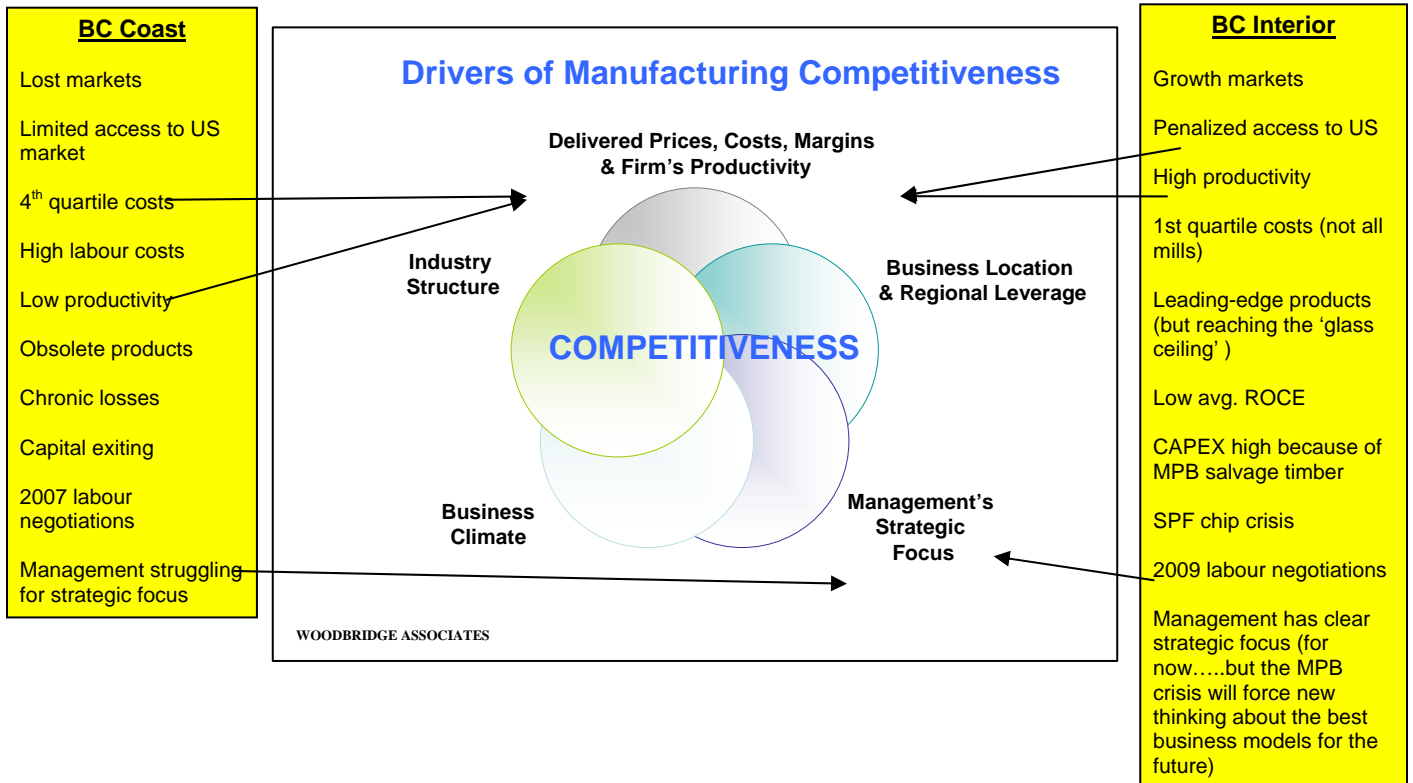
Today, the competitiveness of the BC Coast wood products manufacturing industry is at a low ebb in its long history. The region no longer enjoys a competitive edge from low wood costs and high quality old growth timber. For various reasons discussed later, but notably the very poor business climate that has prevailed on the BC Coast for many years, firms have not invested productivity gains to help offset this decline in competitiveness.

The coastal industry has lost most of its traditional offshore markets for hemlock. As a consequence of the 1996 US-Canada Softwood Lumber Agreement, coastal firms had limited access to the vital US market. To a large extent, the BC Coast's product mix today is obsolete. The Coast industry has some of the highest logging and labour costs in the world. Capital is exiting the region. Management is struggling for strategic focus, and is faced with many challenges (Chart 22)

BC Interior:

Chart 22 shows the contrasts the BC Interior region's competitiveness with that of the Coast. We show later that, in 2004, the Interior region wood product industry enjoyed top quartile (i.e. the most competitive) global costs in lumber, and in OSB production. Over a period of many years, BC Interior mills have offset rising wood costs, and growing competition from offshore supply, through substantial investments in state-of-the-art mills and efficient processing technologies—many operating on a 24/7 basis.

Chart 22



Global Shifts in Competitiveness

Shifts in global competitive positions are having longer term impacts on the BC wood products manufacturing sector. The BC Interior region's competitiveness faces many important challenges. During 2005, its competitiveness has declined sharply due to lower by-product revenues and loss of exchange rate advantage. Costs are rising. The MPB crisis is having long term structural impacts that are negative to the industry. Integrated BC Interior firms, such as West Fraser and Canfor, have made money in the past several years in wood products, but have lost money in market pulp.



Wealth Creation by the Industry

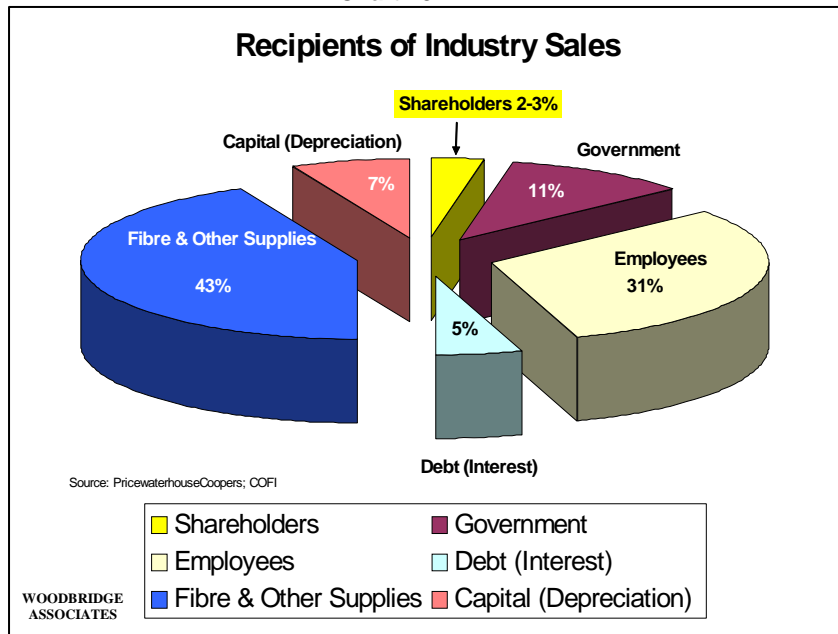
The ability of manufacturing or service firms to generate and distribute wealth to their shareholders, capital providers, performance-linked employees and others is a fundamental driver of competitiveness.

Despite its importance within the provincial economy, the ability of the BC wood product industry to create wealth is constrained increasingly by the financial demands being made on the industry.

Pricewaterhouse Coopers has estimated that fibre and other supplies absorbed 43 cents of every revenue dollar earned by the BC forest industry in 2004. This includes stumpage and other timber charges levied by government. Employees wages and benefits absorbed a further 31 cents from every revenue dollar earned by the industry (Chart 23)

Government taxes and related revenues absorbed another 11 cents from every revenue dollar earned by the industry, while depreciation and interest on debt account for an additional 12 cents. The overall share of the pie available for shareholders is between 2% and 3% -far below what is required to encourage re-investment of equity capital.

Chart 23



From management’s point of view, there is a significant and unsustainable imbalance between the beneficiaries from industry revenues in the BC forest products industry. Many of the beneficiaries (including unionized labour and government) have pricing power, and are able to impose a significant influence over:

- (a) management’s ability and scope to adapt adequately to global competitive pressures, and
- (b) management’s ability to pursue new business models that potentially could create more wealth, and attain a broader base of this wealth creation process (e.g. *new products, new markets, new mills, new plants*).

In the wealth creation process, several other groups of stakeholders have varying degrees of power ranging from (i) increasing the costs of doing business (e.g. property taxes) to (ii) substantially obstructing firms’ ability to do business in BC (i.e. single-issue lobby groups).

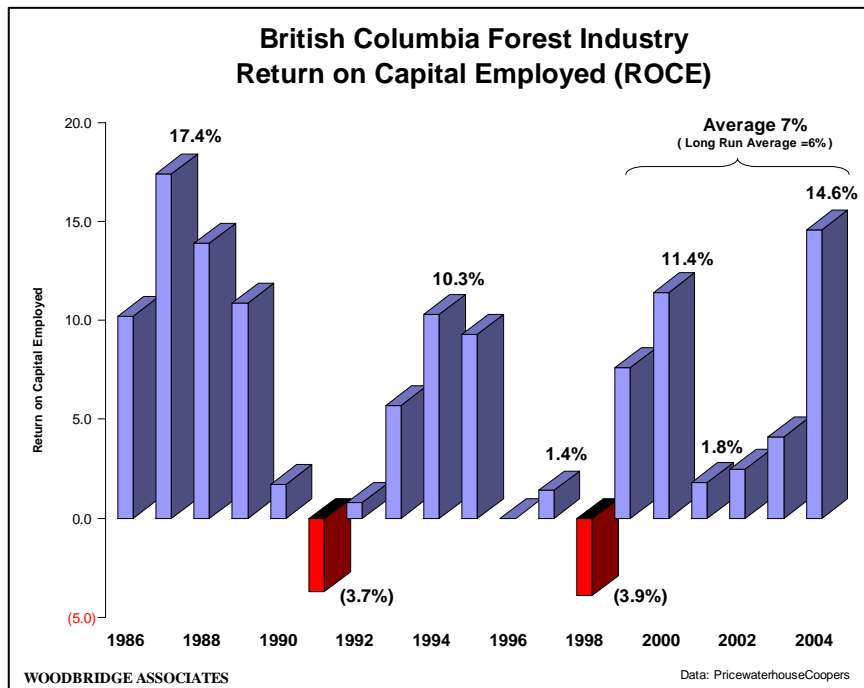


Return on Capital Employed (ROCE) (Margins and Capital Availability)

From the point of view of shareholders and capital providers, the industry provides a chronically poor and inadequate rate of return. Chart 24 shows this for 2004 and indicates that there have been years when ROCE has been negative for the sector as a whole.

The chart shows that the industry's ROCE over the period 1999 to 2004 averaged only 7%. There have been times when the industry's ROCE for a specific year (e.g. 1987) has approached an acceptable threshold rate. But over the whole twenty year period shown, the long run average has been only 6%.

Chart 24



BC Coast Sawmilling Re-Investment Rate (Margins and Productivity)

Chart 25 shows the re-investment rate for the BC Coast sawmilling industry. In the mid-1990s, the green hemlock lumber export business was already in decline, but the real impacts of loss of market share were not felt until the Asian crisis of 1996 onwards.

After 1996, the Coast lumber re-investment rate plummeted. But the re-investment tide had already turned in the 1980s (not shown in the graph). This accelerated with the coastal 'war in the woods', when the industry was besieged by other stakeholder pressures and began a long period of retrenchment. Despite this, surviving and leading edge coastal sawmillers were investing in better and more compliant woods operations. They invested heavily in upgrading of mills and new products based on a smaller log size and lower quality of logs.

BC Interior Sawmilling Re-Investment Rate (Margins and Productivity)

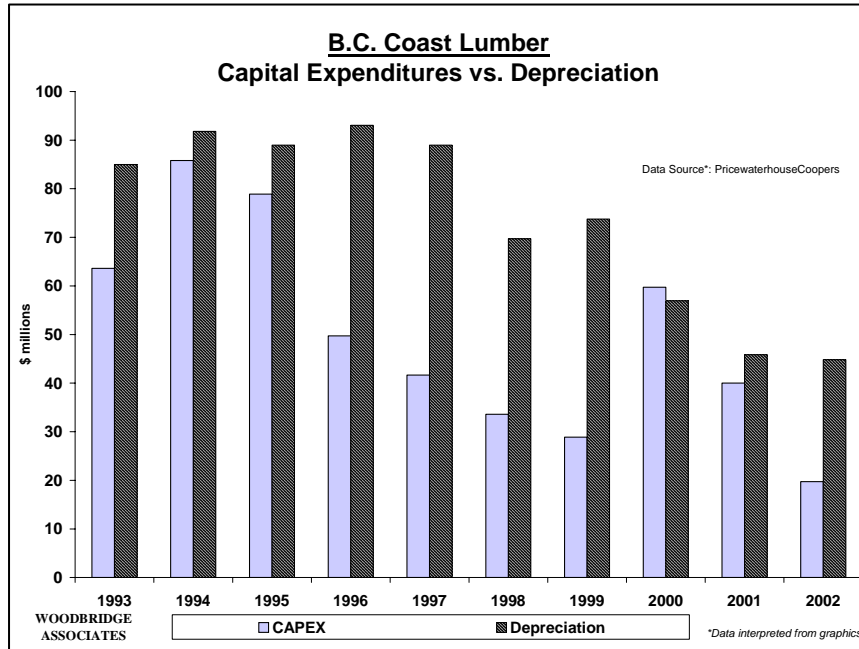
In most years, BC Interior sawmillers have re-invested heavily in their manufacturing facilities (Chart 26). Softwood lumber trade uncertainties have caused some occasional slowdowns in re-investment. A strong surge in re-investment is evident since 2003.

This is associated with the addition of incremental capacity and the construction of 'super mills' and 'mega mills' to process increased volumes of salvage harvesting of MPB beetle-infected pine. Strong market demand exists for SPF lumber.



Despite continued commitment to ongoing re-investments by the BC Interior industry, it is hard to escape the conclusion that the wealth being created for shareholders is inadequate to continue to support a profitable, globally competitive industry. With persistently low ROCE, the increasingly capital intensive business enterprises that management could invest in profitably, and in the process better position BC as a global leader, are hard to justify to shareholders.

Chart 25



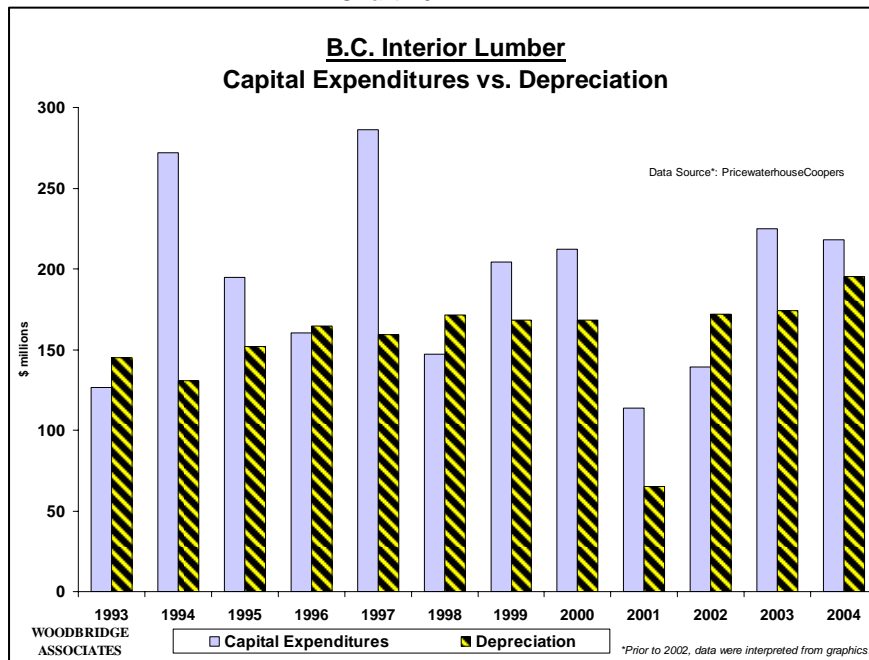
BC Coast

Capital spending to upgrade and modernize coast lumber mills has fallen below the levels of capital set aside for this purpose (i.e. depreciation funds), for more than a decade!

= capital outflows

When depreciation consistently exceeds CAPEX, the industry is not re-investing in upgrading its mills or in equipment renewal.

Chart 26



BC Interior

Capital spending to upgrade and modernize coast lumber mills almost always exceeds the levels of capital (depreciation) set aside for this purpose.

= new capital inflows

In a healthy, growing industry, CAPEX consistently exceeds depreciation

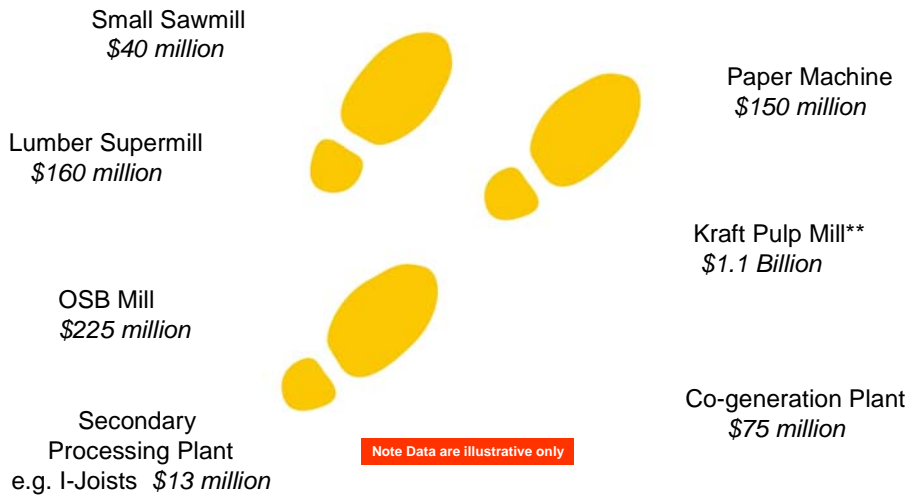


CAPEX ‘Footprints’ (Capital Availability)

Large modern mills are technology and capital intensive. It was noted earlier that over \$17 billion is currently invested in the BC forest industry. Incremental capital could push total capital invested to well over \$20 billion over the next decade. Many strategic capital investments have large ‘footprint’ in terms of magnitude (Chart 27). New state-of-the-art mills range from \$50 million to over \$1 billion, excluding infrastructure. Large CAPEX “footprints” are highly risky—unless conditions are very conducive to them. If in doubt, capital “will walk”.

Chart 27

Forest Products Industry: CAPEX Footprints in BC



In 2004, BC Firms had \$17 Billion Invested in Mills & Manufacturing Plants

WOODBIDGE ASSOCIATES

** Greenfield mill, 10% less on an existing site
 Footprint Images: Courtesy of Google

Human Resources (Regional Leverage)

One of the most significant challenges to the long term competitiveness of BC’s forest industry is the shortage of persons with the skills sets and experience required to meet the needs of this increasingly technology-intensive and knowledge-based sector. There are numerous issues involved in this topic. The Committee has made several recommendations for improving the HR capital of the sector. These are presented in Section 7.

Competitiveness: P3 Partner and Stakeholder Roles (Business Climate)

Several other factors are influential in determining the competitiveness of a region. In regions such as BC, where P3 relationships are part of the sector’s structure, the attitudes of government ministries, ministry executive and staff can have a substantial impact. These are province wide issues and are discussed in Section 7.



Section 5

BC Interior Wood Product Industry



5: BC Interior Wood Product Industry

The BC Interior is the largest producing region of wood products in BC. It accounts for nearly three-quarters all Crown softwood timber harvested in the province and about three-quarters of the province's output of lumber, by value. The region is an important producer of structural panelboards (OSB and plywood) and also manufactures industrial (appearance) grade panelboards, such as particleboard and MDF.

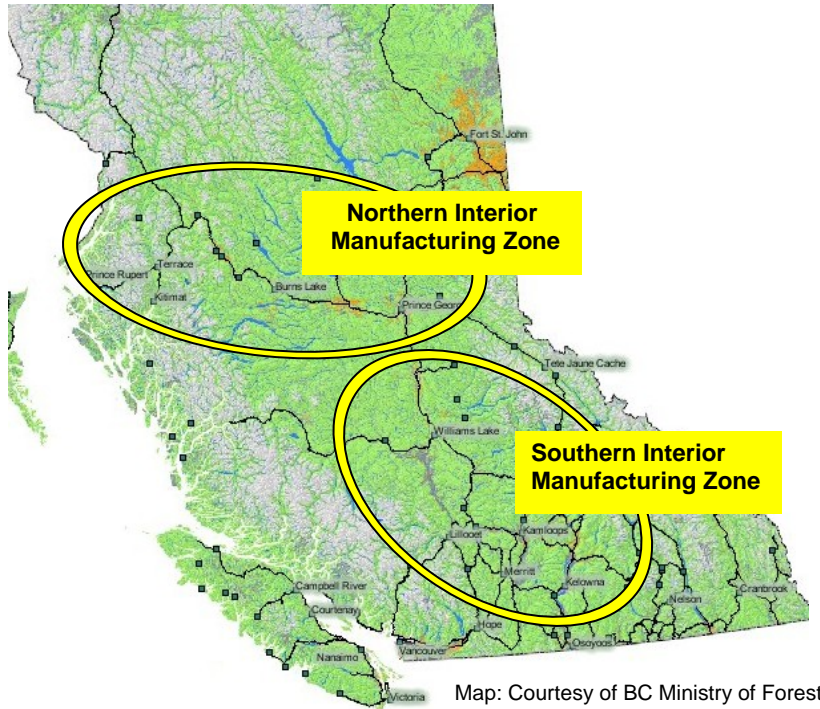
Chart 28

Although often referred to as a single region, the BC Interior comprises a wide range of terrain and forest types. There are two main manufacturing zones—the northern and central-southern Interior (Chart 28). In terms of lumber production, these zones are about equal.

Transportation is a significant issue throughout the Interior. Some mills are located in remote parts of the province and incur high shipping costs to market their products.

Other mills (notably border mills in the south) have available a variety of transportation options but, for example, often face significantly greater competition for purchased logs.

Secondary processing of wood products is more extensive in the south than in the north. These factors give rise to a variety of manufacturing enterprises — and competitiveness issues.

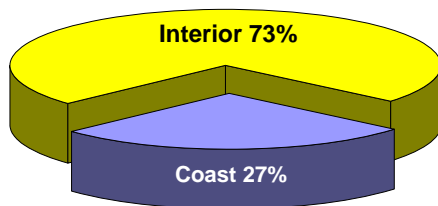


Harvesting

Chart 29 compares harvest levels in the BC Interior with those on the Coast. The Interior accounts for 73% of the Crown timber harvest (2004 Ministry of Forests data), but only about a quarter of the privately owned timber harvest.

Chart 29

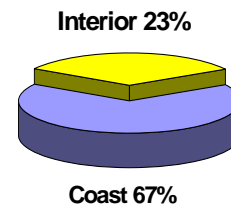
CROWN TIMBER HARVEST



72 Million m3

WOODBRIIDGE ASSOCIATES

PRIVATE TIMBER HARVEST 2004



9 Million m3

WOODBRIIDGE ASSOCIATES

Crown-owned timber dominates the province's total supply to the wood product industry. The proportion of privately-owned forest land throughout the province is expected to rise as land claims are settled.



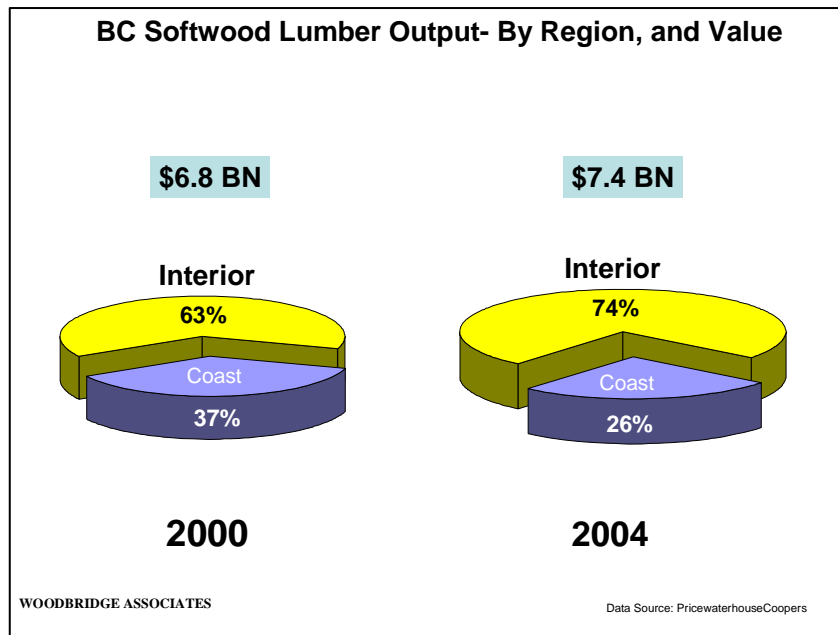
Lumber and Wood Products Output

The BC Interior accounted for 84%, by volume, of the province's production of softwood lumber in 2004, with the balance (16%) produced by coastal sawmills.

Coastal species (which include high valued cedar and Douglas-fir) range more widely in value than Interior region spruce-pine-fir (SPF). On average, a truck or carload of coastal lumber (all species included) typically is priced at around double that of an equivalent volume of SPF lumber. Expressed on a value basis, the BC Interior accounted for 74% of BC lumber sales in 2004 (Chart 30).

Since 2000, the BC Interior's share of total BC lumber production has risen from 63% to 74%, on a value basis. In addition, significant new capacity is being added in OSB—mainly the result of the need to harvest MPB timber in the BC Interior.

Chart 30



Economies of Scale

On a global basis, the BC Interior lumber industry is one of the most efficient. The industry comprises a large number of well-managed automated sawmills and other wood product plants. Lumber recovery factors (LRFs: Chart 32) are among the highest in the world. Volume output per person hour, assisted by intensive capital spending, is also among the best available. This is the core of most of the business models in the region—highly automated, large scale, highly productive processing of roundwood into wood products. In addition, there are some smaller, more specialized mills in the region and several large scale lumber and wood products remanufacturing plants. The healthy continuation of these value-added plants is vital.

The ability of management to consolidate and rationalize manufacturing capacity within BC has improved dramatically over the past five years—in sharp contrast to the province's highly regulated operating environment of the 1990s. This has been vital for firms investing heavily in achieving global competitiveness.

In the process of maximizing economies of scale, the BC Interior historically has been able to drive down unit costs of production to very competitive levels. The West Fraser business model often is used as an example of the region's excellence in this regard. Many super-mills and mega-mills are managed along similar lines. Smaller mills that do not try to emulate this business model usually focus on higher levels of value-recovery.



Lumber Recovery Factors

A number of factors determine how much lumber and other products can be recovered from a log. This includes log size, quality (including the freshness of the log—which increasingly is a problem with MPB timber) and the processing equipment used. BC Interior sawmills have invested heavily and continually in efficient equipment to convert the log, and were pioneers in high productivity technologies such as thin kerf sawing. Today, modern fully automated sawmills use advanced log scanning equipment and software, on-line and in real time, to optimize the volume and quality of lumber recovered from each log (Chart 31).

Chart 31



In the BC Interior, LRFs have continued on an upward trend for many years (Chart 32) and mills operate at or above capacity (Chart 33). The volume of lumber produced from the same log has increased substantially—even from just a decade ago. Productivity in BC Interior mills is matched with high levels of productivity in the woods. The logging industry is very efficient. Some mills have cutting programs that harvest and merchandise logs in the bush (including cut-to-length programs). Others merchandise in a centralised log sort or the log yard at the mill. Most BC Interior mills purchase a large proportion of their log requirements.

Chart 32

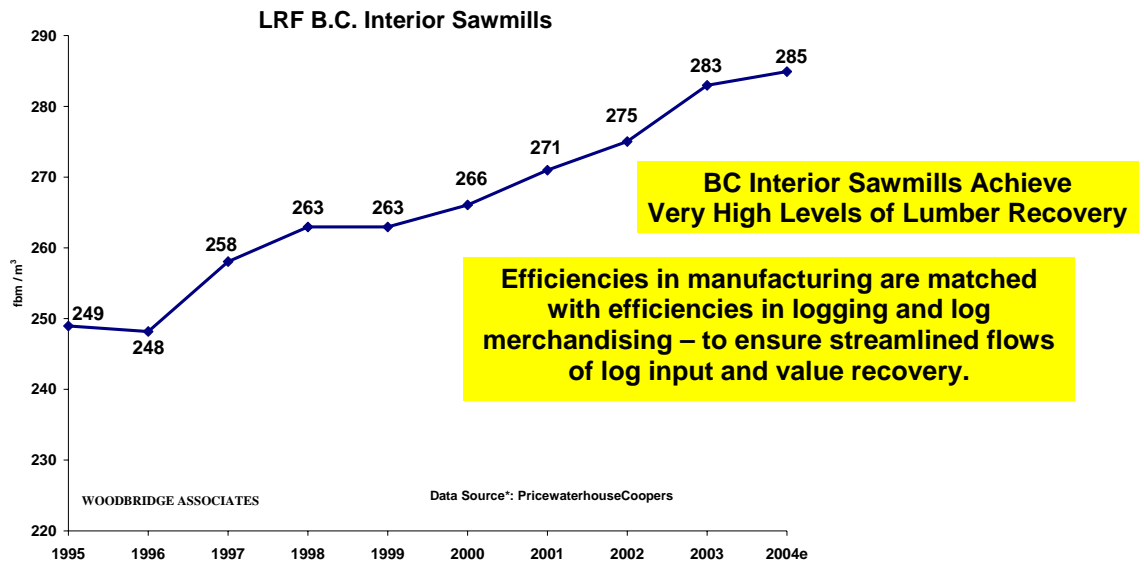
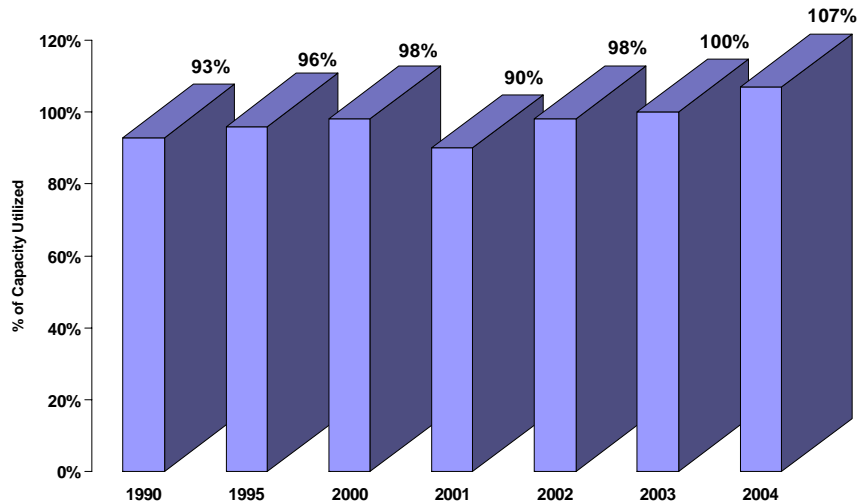




Chart 33

BC Interior Sawmills Operate at or Above Capacity

Buoyant Markets for SPF Lumber, and Salvage Cutting of Beetle-Killed Timber, Have Boosted Output



WOODBIDGE ASSOCIATES

Data Source: PricewaterhouseCoopers

BC Interior Productivity Gains

The most recent phase in BC Interior wood products competitiveness has occurred relatively recently. Faced with punitive US market cash deposit rates of 27% and above (see Chart A, page 8), the region faced a strategic watershed. The response of firms was to consolidate, rationalize and embark on a major thrust of investment, new technology adoption and productivity.

Technology, investment and productivity were linked to a major shift in operating procedures. Many lumber mills have gone to “24/7” hours of operation¹⁴, running almost continually—as do OSB and pulp and paper mills. The result has been to substantially drive down unit costs of manufacturing—and re-capture lost competitiveness.

Faced with punitive US market cash deposit rates of 27%, the BC Interior sawmilling industry faced a strategic watershed. The response of firms was to consolidate, rationalize and embark on a major thrust of investment, new technology adoption and productivity. The result is 1st quartile costs and a globally competitive industry.

Two sets of factors were conducive to this success. Firstly, the provincial government introduced important changes after 2001—notably the Forest Revitalization Plan of March 2003. This substantially reduced previous excesses in regulation and allowed the industry to rationalize and consolidate along market-driven lines. Secondly, BC Interior labour unions were supportive of changes that permitted significant productivity gains to be made. The Interior industry is increasingly capital intensive. It is a showcase for the world, in terms of advanced processing technologies.

Surge in New Investment

Interior mills have increased their scale of operations, and have added additional shifts. Consolidation has also been a factor. Chart 34 shows the increases in scale that are taking place in the industry. In 2003, there were 21 mills in the BC Interior already of world class size—most producing 200-300 million board feet of lumber annually, and many producing in excess of 300 million board feet. Many of these mills have been, or

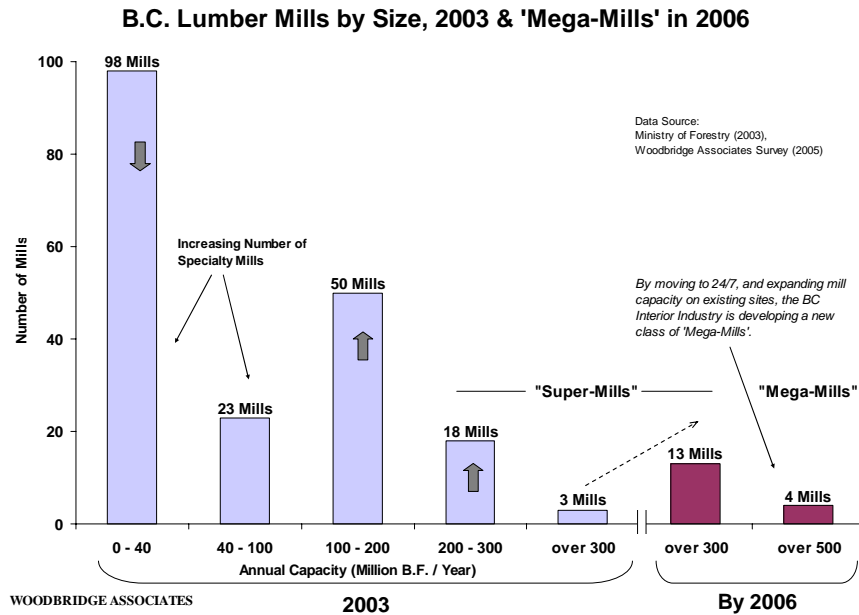
¹⁴ Popularly refers to BC supermills operating “24 hours per day, seven days per week”. In fact, to allow for scheduled maintenance and downtime, most supermills operate less than this – but considerably more hours than the traditional two-shifts.



are in the process, of being upgraded or expanded. By mid 2006, most of these mills will be in the 300-500 million board feet annual production class—and several will be even larger (i.e. in excess of 600 million fbm/year).

The combination of expanded pine harvest levels along with increased manufacturing capacity, and buoyant markets in recent years, has led to very high rates of capacity utilization in most BC Interior mills. Chart 35 showed that average rates of capacity utilization in the BC Interior rose from 90% in 2001 to 107% by 2004. In contrast, much lower average rates are evident for BC Coast sawmills (see Section 6 for details).

Chart 34



Use of Technology for Competitive Advantage

Substantial investments have been made by many BC Interior sawmillers in state-of-the-art equipment to maximize the productivity and competitiveness of their mills.

Chart 35 shows a high speed planer in operation at an SPF stud mill. This planer is able to process five studs per second!

Innovations like these are quickly adopted by other mills, and can be found in the new plants being built by many of the BC Interior SPF industry's emerging competitors in Europe.

Chart 35





Construction Boom

Mill expansion in the BC Interior has generated a construction boom in the region (Chart 36).

Chart 36

Photo: Woodbridge Associates Inc.
Courtesy of Bid Construction



Plateau Mill Expansion 2005



Photo: Woodbridge Associates Inc.
Courtesy of Bid Construction



Photo: Woodbridge Associates Inc.
Courtesy of Bid Construction



It also has had major, beneficial impacts on BC-based equipment suppliers and has created new jobs within the labour force. BC Interior sawmilling firms estimate that over 80% of their mill operating equipment has been procured from sources within the province during this boom.

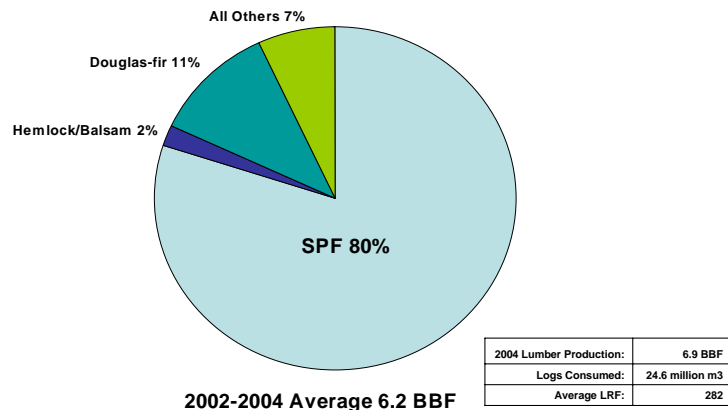
In addition, the boom has created substantial demand for advanced technology based services—again mostly from BC-based firms. Much of this work, notably in support of maintenance operations, will be ongoing. A substantial level of process equipment innovation has been introduced during this construction cycle, helping to position BC service firms as technology leaders throughout the world.

BC Southern Interior Specialty Mills

This region produces about the same annual volume of lumber as the northern Interior. Although there are some dimension ‘super mills’, there are also many highly efficient and well managed mills in the BC Southern Interior region that do not produce a 100% diet of SPF random lengths or studs¹⁵. Some of these mills process other species. Others have developed a significant niche in cutting boards or special sizes—with a focus on achieving higher than average prices. Some of these mills also have re-manufacturing facilities alongside, or operate secondary processing facilities nearby.

Chart 37

**Southern Interior
Lumber Sales By Species**



WOODBRIIDGE ASSOCIATES

Data Source: PricewaterhouseCoopers

BC Interior specialty mills also purchase a significant part of their log requirements on the open market. The species mix of lumber produced by mills in the region is around 80% SPF (Chart 37), with about 11% Interior Douglas-fir, 2% hemlock-balsam and about 7% of other species—including high valued larch. Correspondingly, the prosperity of these mills is vital for the growing secondary wood product industry in the region.

BC Interior Secondary Processing

These activities vary by geographical location. There are proportionally fewer specialty mills and secondary processing plants in the north compared with the south—where growth in population centres creates demand for a wide variety of products for the domestic market, and where an array of transportation options encourages exports to Alberta and US markets.

¹⁵ BC Northern Interior mills also mill Interior fir. But this is small in volume and normally accumulated for special cutting runs, once or twice a year (the “fir run”).



BC Interior Global Competitiveness Ranking

Price competitiveness in international markets is measured by comparing the delivered prices of similar products from competing suppliers to a specific market area, on a currency-adjusted basis, to similar groups of buyers. Precise global comparisons are difficult to achieve, and in most instances broad estimates based on surveys of production cost data provide the best available information.

Recent global cost surveys show that the BC Interior has become one of the lowest cost sawmilling regions in the world, on a net mill basis—adjusted for currency differences. Studies by Wood Markets/PWC/Beck provide global comparisons based on a survey of 2004 costs for a representative sample of producing firms. It is important to note that the study's data do not include transportation and shipping costs—which, in BC's case, are substantial additional costs and which have a significant impact on price competitiveness.

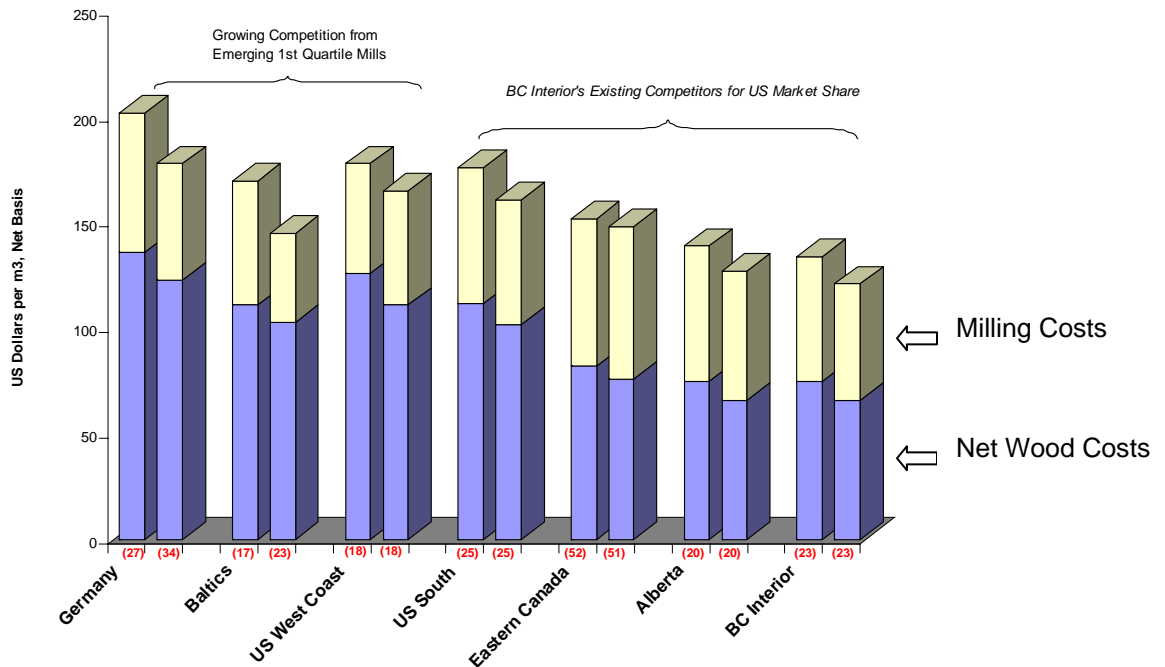
The study's *mill net data* indicate that the BC Interior, along with Alberta in close second place, was the lowest cost producing region for softwood lumber in 2004 (Chart 38).

Four supply regions typically compete in the US market for SPF lumber. Even the most cost competitive mills in eastern Canada and the US South could not compete readily with the BC Interior's costs, on a mill net basis. However, these mills became more competitive with BC Interior mills when transportation costs to US markets were taken into account.

Chart 38

Softwood Lumber: 2004 Global Cost Comparisons

(First Column shows 'Top Quartile' Mills; Second Column shows 'Average Mills')



Data Source: Wood Markets/PWC/Beck

(Brackets) show sawmill revenues from sale of by-product woodchips to pulp mills.



Value-Added Labour Rates

Many secondary processing plants pay union rates and, in some cases, above these rates. However, most starter firms, notably small scale batch production processors, pay rates in the C\$10-\$14 per hour range—well below rates prevailing in sawmills and other primary wood products plants. To facilitate the growth of these firms and help them become competitive, BC Interior unions and firms have developed a value-added labour rate—which is pitched above non-union rates, but below primary mill rates.

Chart 39

Its Sawmill Labour Costs are Not the Lowest, but BC Interior Productivity Levels are High

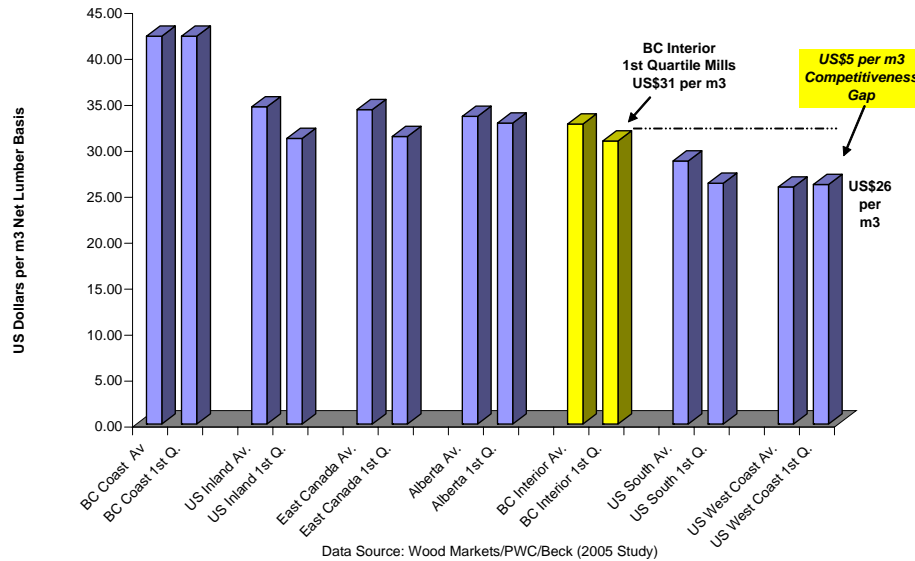


Chart 38 showed lumber manufacturing costs for a group of emerging regions that increasingly are competing with the BC Interior for market share in its largest and most important market—the United States. European producers currently have a nearly 5% market share of the US lumber market.

In 2004, the BC Interior was very cost competitive against these European suppliers. But new, increasingly lower cost, next generation 1st quartile sawmill capacity being constructed in the Baltic countries, in former East Germany and in eastern Europe, has significant market share growth potential. Moreover, many European exporters have ambitious sales aspirations in the US market.¹⁶ These supply regions are becoming very competitive with BC Interior mills. Some of the reasons include:

- ✓ European sawmills do not pay US duties;
- ✓ They produce a square edge (no wane), high quality product;
- ✓ They are targeting BC's "premium markets"—notably retail big box, MSR and treated lumber;
- ✓ A substantial timber surplus exists in Europe—the US market is seen to be a long term market;
- ✓ Some US buyers perceive European mills as a strategic alternative to Canadian mills, which are prone to labour strikes, trade disputes and changes in harvest levels.

¹⁶ For example, in the West Coast Lumber Inspection Bureau mill list (www.wclib.org), there are 192 mills listed. 114 are American, 75 European and 3 are South African. This indicates strategic positioning by these European mills to obtain North American grade stamps, and possibly their intention to ship to the US market.



BC Interior Sawmilling Labour Costs

Based on Wood Markets/PWC/Beck comparative cost survey data for 2004, BC Interior lumber manufacturers' labour costs for average mills were above those of the region's 1st quartile mills (Chart 39) and above 1st quartile mills in most other North American supply regions. 1st quartile BC Interior mills labour costs were almost 20% above the best-of-class mills in the US West Coast region. However, high levels of productivity helped keep BC Interior mills reasonably competitive in this regard.

Impacts of Pulp & Paper Sector Down-Sizing

It was noted earlier that the sale of by-product wood chips produces significant levels of revenue for sawmills. Thus, in each region, the health of the local pulp and paper sector is of vital interest to sawmillers, and to other producers of wood products (e.g. sale of shavings and sawdust from secondary wood processing plants). Chart 38 shows these revenues (in brackets). They are vital to mills' income.

For many regions, such as eastern Canada, by-product revenues are substantial (US\$51-52 per m3) and they hold the key to sawmills' profitability. Globally, changes in the viability of the domestic pulp and paper manufacturing sector, linked with mill and machine closures and curtailments, are having profound impacts on the viability of the local sawmilling industry in those regions.

As the pulp and paper sector "re-sizes" to more globally competitive levels, and reaches a new, lower critical mass, the demand for residual chips adjusts to the new levels. This process is taking place currently in eastern Canada, and is increasing in BC. Sharp declines in by-product demand and revenues are being experienced by sawmills. In 2005, this situation resulted in dramatically lower revenues for sawmills in the BC Interior, and this is expected to continue throughout 2006 and beyond.

Table 2 provides an indicator of future earnings trends for the BC Interior—notably, via the potentially negative impacts of lower by-product revenues. Based on PricewaterhouseCoopers' data, the table shows that chip revenues in 2004 were the equivalent of 50% of BC Northern Interior operating earnings. In early 2006, because of excess supply, SPF chip prices have declined to less than half their level a year ago.

Table 2
PricewaterhouseCoopers Report for COFI (June 2005)
Lumber: BC Northern Interior Average Earnings C\$/mfbm

	2004	2003
Mill Net	390	293
Chip Revenues	49	37
Total Revenues	439	330
Total Direct Costs	318	305
Total Indirect Costs	23	21
Total Costs	341	326
Operating Earnings	98	4

Chip revenues were the equivalent of 50% of operating earnings in 2004!
 They will be much lower from 2005 onwards



Competitiveness Issues Facing the BC Interior Wood Product Industry

A wide range of competitiveness issues currently face the BC Interior wood products manufacturing industry. Many of these will require solutions that are in the private sector's domain. For example, manufacturing overcapacity is best resolved through market factors, rationalization, consolidation and/or other remedies. Others issues involve factors, such as exchange rates, that are outside the scope of the provincial level P3 relationship discussed in this report.

In other cases, such as finding an equitable and lasting resolution to the US-Canada softwood lumber agreement, existing processes are in place or separate initiatives are appropriate.

Clearly, in the majority of situations, where private sector initiated solutions are appropriate, it will be important for the province (as a P3 partner with the industry) along with other regulatory authorities (e.g. federal Competition Bureau) to facilitate a smooth transition of ongoing industrial restructuring.

The Committee has identified a list of competitiveness issues facing the BC Interior industry that can be influenced through changes in the industry's operating environment. They include issues where public policy changes (such as eliminating regulatory burdens) and/or where undertaking new P3 initiatives (including organizational reform and program funding initiatives) would help improve the BC Interior region's overall competitiveness.

Key issues, in random order, include the following:

- The need for reduced uncertainty about future log supplies to the industry in the post-MPB era, notably with respect to sustainable levels of economically accessible supply to sawmills and other wood product plants (e.g. OSB, CSP plywood);
- The need to accelerate the transition to market-based timber pricing;
- The need to make BC Timber Sales *significantly* more effective;
- The need to find financially viable manufacturing solutions to the rising surplus of SPF wood chips;
- The need to create a much more effective and businesslike P3 relationship within government ministries in their dealing with the industry and to identify persons within government who will be responsible and accountable for achieving these goals;
- The need to ensure a smooth transition in the ongoing re-structuring of the BC Interior wood products manufacturing industry, and particularly to facilitate capacity rationalization as the need arises;
- The need to eliminate numerous costs inadvertently or consciously imposed on the industry through government actions in managing its P3 responsibilities and/or through implementing regulatory measures.

In addition, the Committee identified a wide range of other issues which, although not necessarily critical to the industry's ability to carry on its immediate business, will have increasingly significant effects over the short, medium and longer term competitiveness of the BC Interior industry. They include issues such as:

- There is a significant and rising skilled labour shortage in the BC Interior workforce. These shortages range from the lack of entry level workers to inadequate re-training of existing members of the workforce to excel at the increasing number of technology-based jobs being created (see Committee's proposal for post-secondary education skills training);
- Forest-based communities in the BC Interior depend on the ongoing viability of forest manufacturing enterprises for the majority of their economic well-being. Yet there is a mismatch in many communities between economic benefits derived from the industry (e.g. through property taxes) and the economic well-being of the industry. Closer linkages between the two are desirable (see Committee's proposal for a *Resource Dividend*);



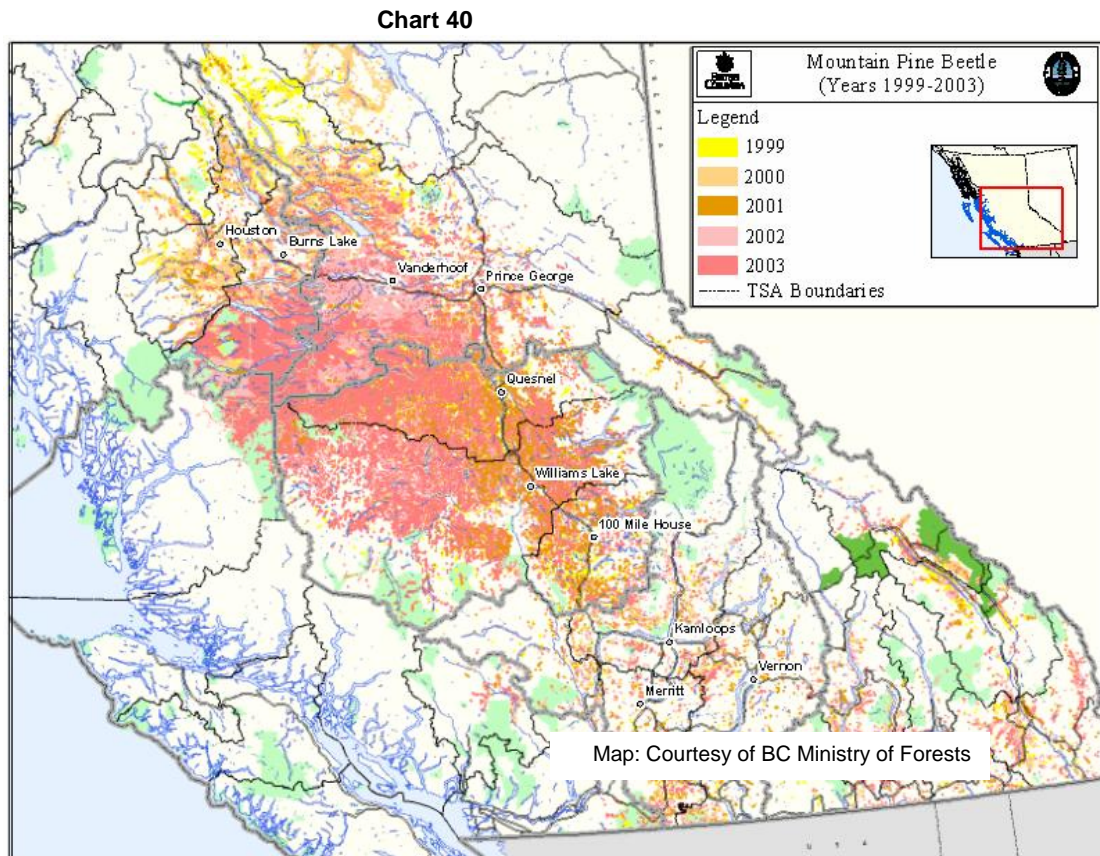
- First Nations are key partners in the BC forest industry. Their participation in various aspects of the industry's evolution is vital (see Committee's proposal for post-secondary skills training, technology transfer and the proposed *Resource Dividend*);
- Bio-energy related investments are likely to become increasingly important aspects of the BC Interior manufacturing sector, and will provide increased opportunities for economic linkages between sub-sectors of the forest economy. Investment attraction relating to these technologies will be a high priority for many several forest-dependent communities. (see Committee's proposal for bio-energy and power generation projects).

Discussion of BC Interior Priority Issues

Issue: The Mountain Pine Beetle Crisis

Several programs are already underway to tackle the immediate and longer term impacts of the MPB crisis. Additional initiatives are recommended later in this section by the Committee.

Chart 40 illustrates the extent of the epidemic in 2003 (More recent data are available on the BC Ministry of Forest and Range website).



Of particular note in this chart is how quickly and extensively the epidemic spread over the early years of the outbreak, and notably between the years 1999 to 2003. The implications for the competitiveness of the region's manufacturing sector are readily apparent.

Without extensive salvage logging, and Ministry of Forests and Range directions to industry to harvest infected stands as the first priority, all other attempts to control the epidemic would have fallen far short of the efforts required.



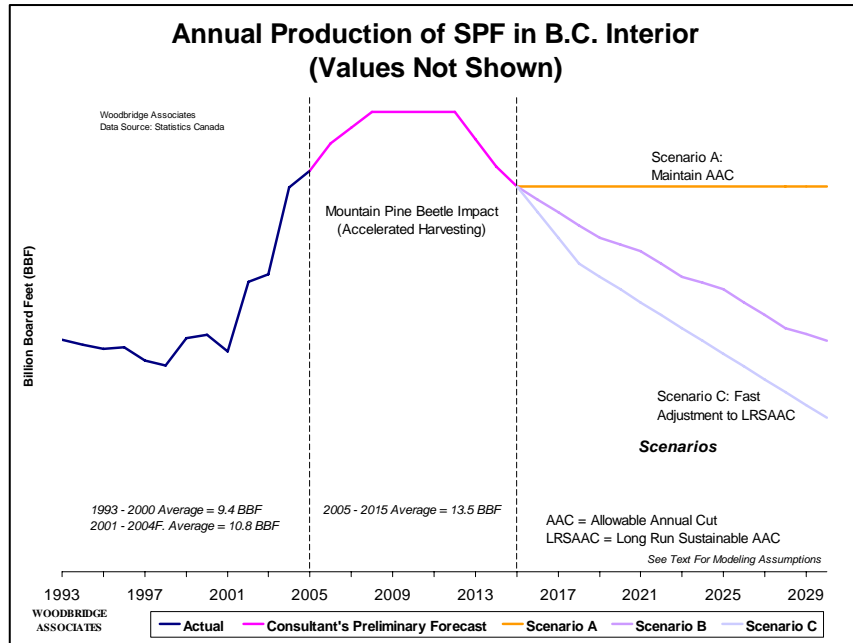
Chart 41

In terms of business risks, the uncertainty that inevitably surrounds the MPB epidemic is perceived by capital providers to be a significant potential impediment to future CAPEX beyond the current flurry of capacity expansions.

This adds to the risk premiums imposed, and raises the costs of doing business.

The precise extent and full impacts of the epidemic will remain unknown for some time.

Nevertheless, having a comprehensive plan and communicating it to address various future harvest scenarios (Chart 41) is vital.

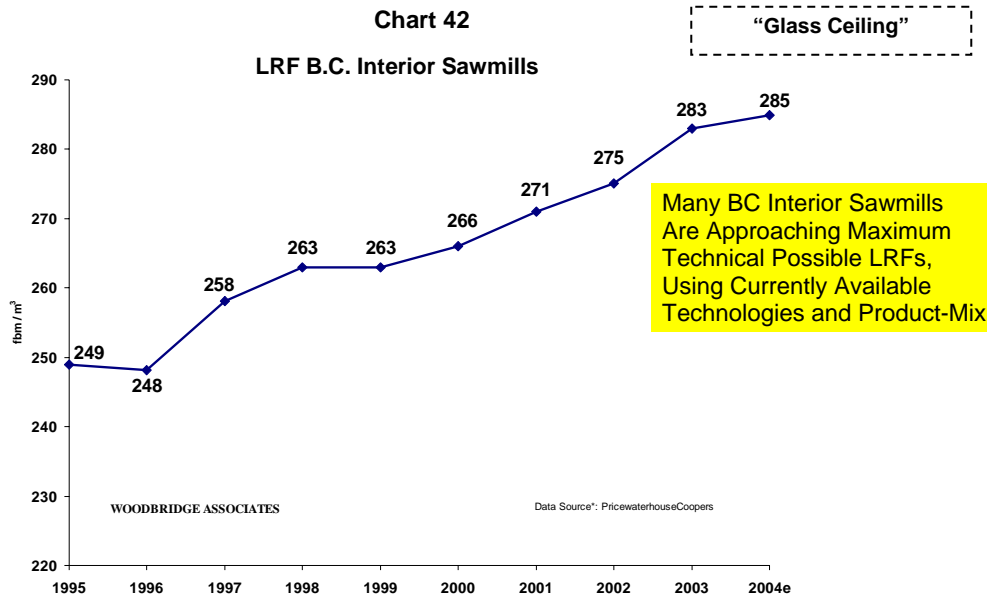


Declining Cost Competitiveness

It would be easy, but erroneous, to conclude from the sawmilling global cost comparisons presented earlier that the BC Interior lumber industry will automatically continue to enjoy a 1st quartile cost competitive position on the global supply curve. The Committee has already outlined some of the reasons that this is not likely to be the case. Some additional reasons include the following:

- (1) **The BC Interior sawmilling industry is rapidly approaching the technical limits to further productivity growth.** A “glass ceiling” to higher LRF’s is approaching (Chart 42). Many BC Interior mills are already operating at, or close to, maximum capacity (many on a “24/7/365” basis (see previous notes regarding this definition), net of maintenance time) and few have any significant scope for substantial additional productivity gains that will help them offset rising costs.

Chart 42



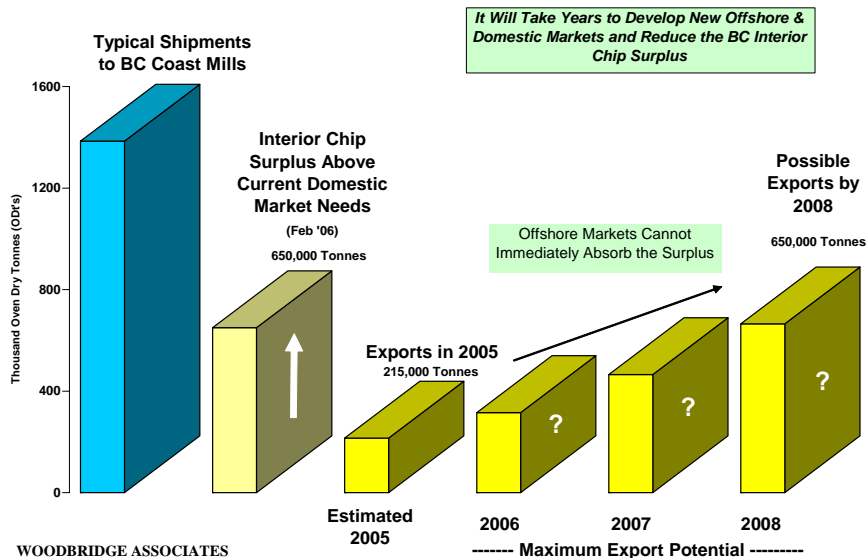


(2) **The BC Interior industry no longer enjoys the benefits of sector mutual inter-dependence that have provided it with a significant competitive edge in the past.** Demand and pricing of SPF lumber has entered a new phase that is significantly less financially beneficial to Interior sawmills.

- i. The system of mutual inter-dependency between the Interior wood products and pulp and paper sector established since 1960.¹⁷ is breaking down because of excess (MPB harvest related) SPF chip supply, and substantially lower SPF chip prices.
- ii. The SPF chip surplus is so large today that many sawmills cannot physically sell their stockpiles. Shipments are being made as far east as Thunder Bay, Ontario—for little or no net return.
- iii. The ability of existing offshore exporters of woodchips (i.e. Fibreco) to find markets for these chips is very limited in the short term (Chart 43).

Chart 43

BC Interior Excess Chip Surplus (Feb 2006) is 3 Times the Volume Exported in 2005, and Rising Rapidly



A recent assessment (November 2005) indicated that the SPF chip surplus was over 1.2 million m³ and rising rapidly (Chart 43) – possibly to over 1.5 million m³ currently. In 2004, only 166,000 m³ of chips was exported through Fibreco, BC’s main exporter of surplus chips¹⁸. Coastal pulpmills have expanded their use of SPF pulp chips and, in 2005, it is likely that around 3.3 million m³ of residual chips (all species) will have been shipped to the BC Coast.

Neither chip exports nor expanded sales offer a complete solution for the “mountain” of SPF chips that is developing. The November 2005 SPF chip surplus was 3 times BC’s total chip exports (all species) in 2004. Even with expanded exports, more than doubling in 2005, BC Interior sawmills will not be able to find ready markets for their surplus chips. Revenues and overall competitiveness will decline, and this trend will continue for the foreseeable future.

¹⁷ This policy was introduced coincident with the BC Interior SPF sawmilling industry expansion and the 1960s construction of the Castlegar market pulp mill. Compatible market pulp and lumber capacity expansions continued northwards through the period 1960s to mid 1980s.

¹⁸ A small (and also rising) additional volume is sold to Alberta, Ontario and other North American markets directly by BC Interior sawmills.

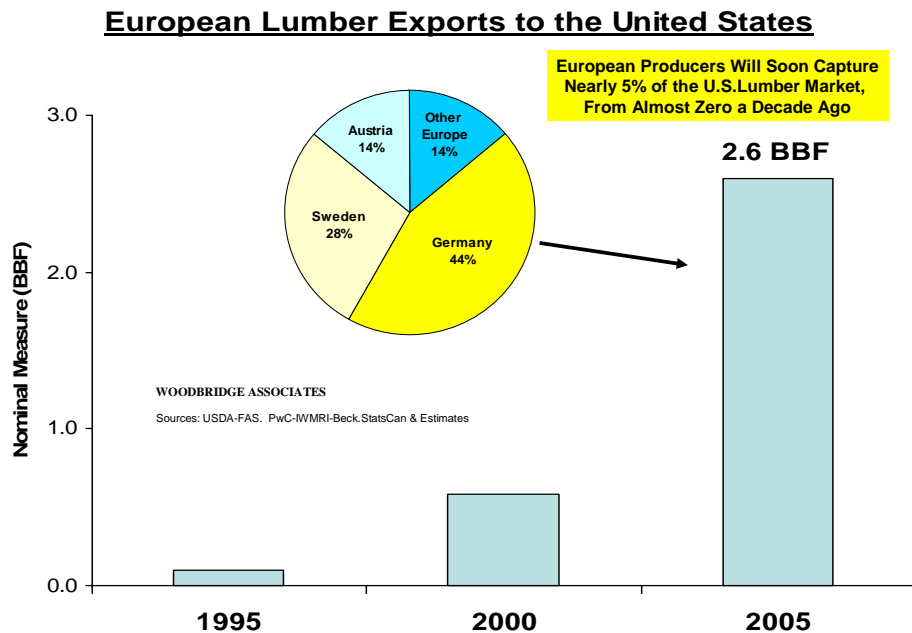


- (3) **New competition for market share in the United States is occurring**, notably from Europe (Chart 44). This involves a structural change in the supply profile to the U.S. market. Moreover, it is tariff-free competition, and is aimed at higher quality markets.

Chart 44 also shows that European exports of lumber to the United States derive from two main sources. The traditional Euro-spruce lumber exports from Sweden accounted for about 28% of US imports from Europe in 2005. Many of these mills have comparatively high costs, and this export volume reflects lumber surpluses in Sweden relating to a storm caused timber blow-down.

However, a significant volume of lumber is being shipped from new, very cost competitive sawmills being constructed at state-of-the-art mills in the former East Germany, along with 'new' supply from other former Soviet-occupied countries. Traditional suppliers with mill located in Austria and Germany also are shipping increased volumes. Few incremental markets exist in Europe for this wood, and much of it is targeted at markets in the US and Asia.

Chart 44



- (4) **Government-related costs are rising.** The nature of the P3 relationship between the industry and the Province of BC provides government administrators with extensive scope to regulate and add to the industry's costs, without any meaningful service plan safeguards or accountability within government to prevent this from happening. This adds unnecessarily to the industry's costs.
- (5) **Government has multiple and mixed objectives.** The Ministry of Forests Act and the Ministry's Service Plan pay only lip-service to the need for Ministry staff to provide commercially focused services to the industry.

There is a lack of understanding (and interest) within government that, as *the* provider of the majority of timber harvested in the province, it should unequivocally define itself as being in the timber supply business.



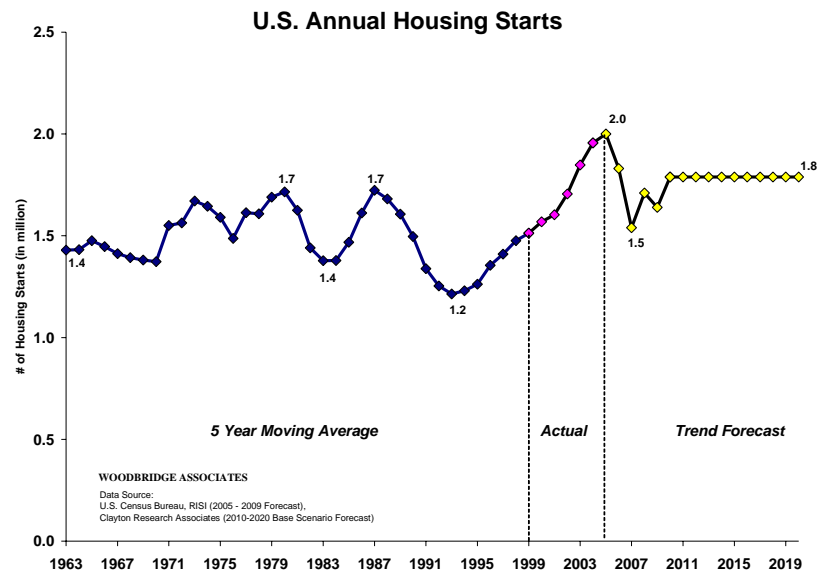
The current culture within the Ministry of Forests and other ministries, in this context, is un-businesslike and cannot be sustained financially by the industry. In the BC Interior, this culture is adding increasingly to the “hidden cost” burden of working with government in commercial transactions.

(6) **New economics are emerging for the BC Interior**

The “good news” for the BC Interior region is that consumption levels in its major export markets for building materials—US residential housing, non-residential construction and industrial applications—have sound fundamentals. Overall, North American demand for structural wood products, other building materials and many non-structural wood products, such as MDF, is predicted to remain strong on a trend basis for at least the next several decades.

Much of the impetus for this consumption growth is provided by demographic factors. These are expected to support, for instance, comparatively high housing starts (Chart 45). With expected rising interest rates, new residential construction levels will decline from recent high levels, but will remain above historical averages on a trend basis.

Chart 45



For the BC Interior, structural engineered wood products and emerging shifts in supply chain relationships and economics will provide most of the expected boost in demand for technology-related growth products and services.

The BC Interior industry is a pioneer in developing new business with large scale national accounts in the United States. The Interior industry is well positioned to provide global sourcing of structural and non-structural wood and wood-based products.

Depending on a variety of factors, including BC’s investment climate, increased capacity in structural engineered wood products could take place in the region over the next decade.

(7) **Bio-Energy technologies will impact the economics of wood manufacturing**

For the immediate future, the BC Interior region faces rising energy costs. Clearly, the public policies that lie behind energy pricing, taxation (Kyoto Accord) and the sourcing of new and alternative forms of energy extend well beyond the forest sector.

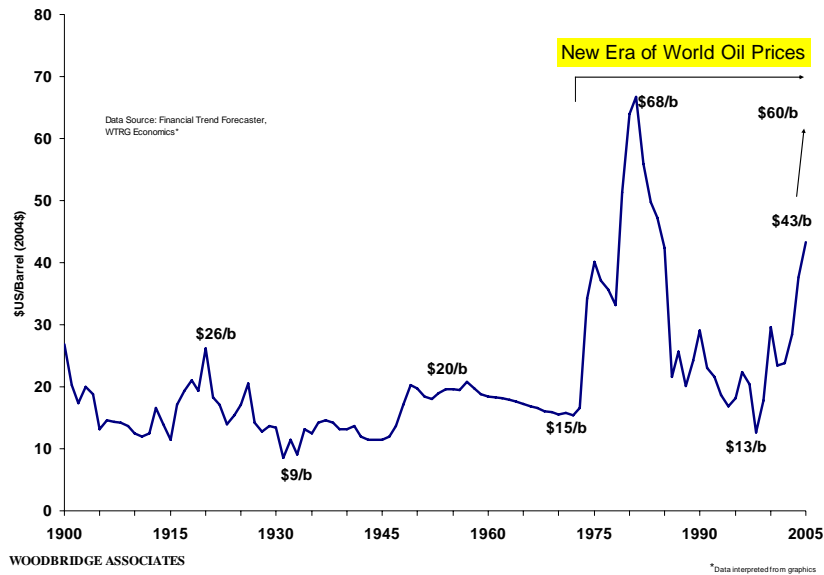


But they have a huge impact on the economics of BC's forest sector.

The impacts of energy-related and pricing policies undertaken in jurisdictions, such as the Province of Ontario, illustrate how serious an impact they can have on the viability of the local forest sector. In Ontario's case, rapidly rising energy costs (stemming from decisions made over a decade ago and since) are a significantly contributing cause of the sudden loss of competitiveness of that province's forest products manufacturing industry.

The reality is that the world is in a new era of energy costs (Chart 46) which is likely to prevail for some considerable time.

Chart 46
Crude Oil Prices (Inflation Adjusted)



Existing and emerging product-market technologies in which BC's pulp and paper sector has a global competitive advantage (e.g. mechanical pulp based publication papers) are sensitive to rising high energy costs (see *Pulp & Paper IAC report to BC Competition Council*). Along with pulp and paper products, BC Interior wood products are exposed to high energy costs (compared with most other sectors of the economy)¹⁹.

Within the forest sector, however, most BC Interior wood products are somewhat less exposed than pulp and paper products to high and rising energy costs. Energy as a percentage of mill net operating costs range, for example, from close to 40% for linerboard and 11% for market pulp. In wood products the equivalent rates are 21% for MDF, 9% for lumber and 2% for OSB.²⁰

It seems probable that BC Interior wood product manufacturing firms will have to identify and act on strategies, including bio-energy generation, that will help reduce the sector's exposure to spikes in purchased energy costs.

Chart 47



¹⁹ CIBC-World Markets study 2005

²⁰ Source: CIBC World Markets



These actions would help position the industry competitively in world markets. Chart 47 shows a detail from a wood pellet plant—one of many recently constructed in the BC Interior.

(8) **Transportation Costs are Rising**

Rail transportation services are provided to BC Interior wood product manufacturing firms and distributors by Canadian National (CN) and Canadian Pacific (CP) railroads. In the Vancouver-Lower Mainland region, rail linkages to the US are also provided by US carriers, including Burlington Northern.

Railroad consolidation has resulted in a number of changes. Some of these are beneficial—for instance, efficiencies have led to reduced shipping time on the ‘Chicago Express’ from northern BC to the US Midwest. Lack of rail competition, on the other hand, also means that many BC Interior firms depend on a single rail carrier. Service levels are vital. Current points of concern range from ongoing shortages of railcars to shipping rates. Trucking is not a viable alternative for many markets served by the BC Interior.

Committee’s Recommendations for the BC Interior

The Committee’s terms of reference (see *‘Letter of Transmittal’*) are to provide two or three key recommendations to the BC Competition Council that can be acted on promptly and which will improve the structural competitiveness of the industry. As noted already, recommendations regarding the US-Canada softwood lumber trade file are not included in this report—as there already is a mechanism in place for this task. However, a “US Market Access” filter should be applied to all policy changes proposed by government.

The Committee’s principal recommendation for the BC Interior wood product industry focuses on the need for ongoing cost reductions in the Crown timber supply chain, greater P3 efficiencies and ensuring certainty in future timber supply. Specifically, the Committee recommends that:

*The Industry should take primary responsibility for managing strategic and operational transitions in manufacturing activities located within the region through a **BC Interior Transition Plan**. The Government of BC should work with industry to ensure that adequate supplies of economically accessible logs are provided to Interior mills on a market-pricing basis. Government at all levels should provide sufficient resources to ensure that all public sector services, and supporting policies, and interfaces with industry and service providers including infrastructure support, are provided and implemented in a cost-effective, sustainable, timely and commercial manner.*

Softwood Lumber Trade Negotiations

Clearly, this is one of the most urgent and substantial issues affecting the competitiveness of the BC lumber industry. It is discussed extensively in this report. However, as a national process is in place dealing with it, the Committee has not made any recommendations regarding this issue other than that a “US market access” filter should be applied to all government policy changes.

BC Interior Transition Plan

Under the proposed *Transition Plan*, specific initiatives for the BC Interior region should include:

1. Mountain Pine Beetle Action Plans: *The Committee supports current initiatives but proposes that a province-wide forest industrial strategy should be created (see notes below) to (a) provide coordinated regional planning and (b) coordinate the identification of ways to diversify and stabilize community economies during and after timber supply fall-downs.*

2. Timber Pricing and ‘Value-Slide’: *Implement as soon as possible a market responsive timber pricing system to replace the existing Comparative Value Pricing (CVP) mechanism, which is no longer functional. Unlike the CVP system, the new system must recognize the market value of Crown timber and fully reflect any value deterioration in the quality of timber associated with MPB ‘value-slide’ impacts (see notes below).*

3. SPF Chip Surplus: *Identify and implement innovative programs to find alternative uses and markets for the mounting surplus of SPF and other species pulp chips, and other residual fibre.*



4. Innovative Forms of Crown Tenure: *Develop innovative forms of tenure that will attract long term private sector capital investment, and commensurate rewards, in area-based and other forms of tenure for forest renewal and higher levels of forest management on Crown forests in the BC Interior.*

5. New Investment and Secondary Processing: *Develop an industrial strategy and investment attraction program for the secondary processing industry based not on resource driven policies (timber allocation), but on 'market pull' factors. This market-development focussed program should include small business and First Nations training in business and financial planning, marketing and engineering, along with expanded mechanisms for technology support.*

6. Non MPB Timber Stands: *Allow logging of non-beetle infested Crown timber and species in order to supply value-added and specialty markets, including plywood and log home builders.*

Notes on Key Recommendations for the BC Interior: Mountain Pine Beetle

British Columbia is experiencing a natural catastrophe with the worst Mountain Pine Beetle outbreak in its history – the most significant natural disaster in the history of the Province. Ten million hectares and, to date, over 420 million cubic meters of Lodgepole pine have now been cumulatively attacked by the beetle during this epidemic.

The attacked volume represents more than six times the “normal” provincial annual allowable cut. In the last three years the AAC has been uplifted by 14 million cubic meters in an attempt to capture some value from the attacked forest before it deteriorates. The provincial and federal governments have predicted that by 2013 there may be as much as 960 million cubic meters attacked.

The magnitude of this epidemic has made it much more than just a forest management issue. The impacts of the epidemic have and will continue to affect the provincial economy – in the first few years causing an increase in activity in harvesting and milling followed by a negative impact for a significant period of time as a result of the drop in timber supply. These impacts will affect communities, workers, the forest industry, other forest resource dependent sectors, environmental values and government revenues.

The focus of beetle management efforts to date has largely been focused at control. Well valiant in the attempt, they have failed. The Province of BC recently has created an Assistant Deputy Minister position in the Ministry of Forests and Range with responsibility to address beetle management issues. It will be important that this ADM should receive the fullest cooperation from all other ministries. The Province, through this ADM, must develop aggressive, strategic and operational plans to address the impacts on all stakeholders and values affected by the epidemic now and into the future.

While there is need to continue to focus control efforts at cross-border spread into the Boreal forest, the BC focus must now be on management of the enormous volume and area of attacked forests.

To stay current with the epidemic, and to capture any economic value of the fibre, the current harvest of pine in the epidemic areas will need to more than double for the next decade. This is not realistic for a number of reasons. Sawmilling is already close to capacity in the Interior of the Province. Significant additional sawmill capacity is not planned. There are ongoing interests in OSB and fuel pellets, but no firm plans are yet in place.

It is clear that there will be vast areas and large volumes of beetle attacked pine that will not be harvested economically. Knowing this, one of the management challenges is to address where these areas will be and how they will be managed past their economic life.

This epidemic is a wicked problem that needs a clear, focused management framework. Government must develop strategies for economic, social and environmental stability by community, sub-region and region throughout the Interior of the Province. Fundamental to the development and success of this framework will be complete, reliable and timely information. One of the prerequisite information needs will be to understand the short, medium and long-term timber supply impacts of the beetle epidemic.

The Council of Forest Industries (COFI) in concert with the Ministry of Forests and Range, the Ministry of Agriculture and Lands, the Cariboo-Chilcotin Beetle Action Coalition and the Omineca Beetle Action Coalition has prepared a report that will illustrate, given certain reasonable assumptions, the timber supply impacts of the epidemic across the interior.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

This analysis covers 18 management units where Lodgepole pine that has been attacked, or is at risk of attack. The results of the report will allow planners and decision makers required insight into:

- What the impacts of a harvest that is focused, or not focused, on beetle-attacked volume might be. This should include analysis of how much area and volume will not be salvaged;
- The volume of fibre that would have to be harvested to capture all of the attacked volume within its economic life;
- The opportunities of where rehabilitation works might best be focused to achieve stability objectives for communities and existing infrastructure;
- How government may wish to adjust the “fibre basket” of wood supply and wood flow to the existing infrastructure; and,
- Where there is limited opportunity to minimize impacts by management of the timber supply.

This information can be used, and questions asked, in each of the eighteen management units analyzed, or by any combination of management units across the Interior of the Province.

Supporting Initiatives:

1. Provide the correct economic and market-based signals to existing licensees for the harvesting of attacked stands. Specifically, do not create disincentives or penalties for harvesting non attacked stands as many mills cannot utilize the species and grades of the attacked stands. Examples of signals include: timber pricing, regeneration requirements and costs.
2. Provide the correct economic and market-based signals and access opportunities to existing licensees to harvest the current un-harvested AAC – approximately 8 million m³.
3. Significantly reduce the costs of all planning and administrative burdens to allow access to attacked stands. Examples include cutting permit notification, simplified appraisal submissions and approvals, road permit obligations and adjacency rules.
4. Review the current ‘fibre basket’ constructs for maximum utility of existing harvesting, mill, transportation, marketing and community infrastructures.
5. Immediately create a plan for managing the vast areas and volumes of unsalvaged pine, e.g. zone areas for ‘high intensity timber’, non-timber and so on.
6. Immediately begin work on rehabilitation of areas that will not be economically salvaged.
7. Immediately create plans for the protection of communities from fire and hydrological effects and rehabilitation.
8. Consider providing assistance for capital investments into non building materials and alternative uses for stands that will not be economically salvaged for building materials.
9. Develop sectoral plans by community, sub-region or region to diversify and stabilize the economies during and after the timber supply fall-downs.

Notes on Key Recommendations for the BC Interior: Transition to Full Market-Based Pricing

It is now generally accepted that the Comparative Value Pricing (CVP) mechanism used to calculate stumpage rates for standing Crown timber in the Interior of the province is no longer functional. This situation has arisen for two specific reasons. Both are attributed to the Mountain Pine Beetle.

Firstly, the Grade 3 (dead/dry timber) waterbed has grown to such a magnitude that “ad hoc” adjustments have been required (August 1st 2005 and January 1st 2006) to manage the impact of the waterbed on green sawlog stumpage rates.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

Secondly, the declining value of the beetle attacked pine is not accounted for within the CVP system. The average stumpage rate does not decline to recognize the reduced value of the resource. In other words, there is no automatic mechanism within the CVP to adjust the target rate in recognition of changing economic circumstances. These issues have profound implications for the economics of the Interior forest industry and for government revenues.

The industry is firmly of the view that a new market based timber pricing system is urgently required that will automatically recognize the changing economic realities, and that this system must:

- Be rooted in economic logic
- Provide for an appropriate share of resource rents for the Crown
- Provide the industry with an opportunity to earn an appropriate return on capital
- Be consistent with the Beetle Management Strategy

Notes on Key Recommendations for the BC Interior: Pulp Chip Surplus

Accelerated harvesting of beetle-killed stands is having a wide range of side-effects. One that is having major financial consequences on BC Interior sawmillers, and the province's pulp and paper sector, is the large additional volume of pulp quality wood chips and other residuals (sawdust, shavings, hog-fuel) being generated. This situation has altered the previously finely-tuned balance of fibre supply in the BC Interior, and flows to the BC Coast.

Market based solutions are being pursued. But, historical inter-dependencies between independent sawmillers and the integrated industry are being permanently altered. Industry-wide measures to find alternative uses for the chip surplus are urgently required. Longer term policy planning is required to balance residual fibre flows with needs in the post-MPB era.

Impacts of the Detailed Recommendations

The Committee's recommendations would have a range of varied but positive impacts, including reductions in the cost of doing business and enhancing the conditions for attracting new capital on a sustained basis.



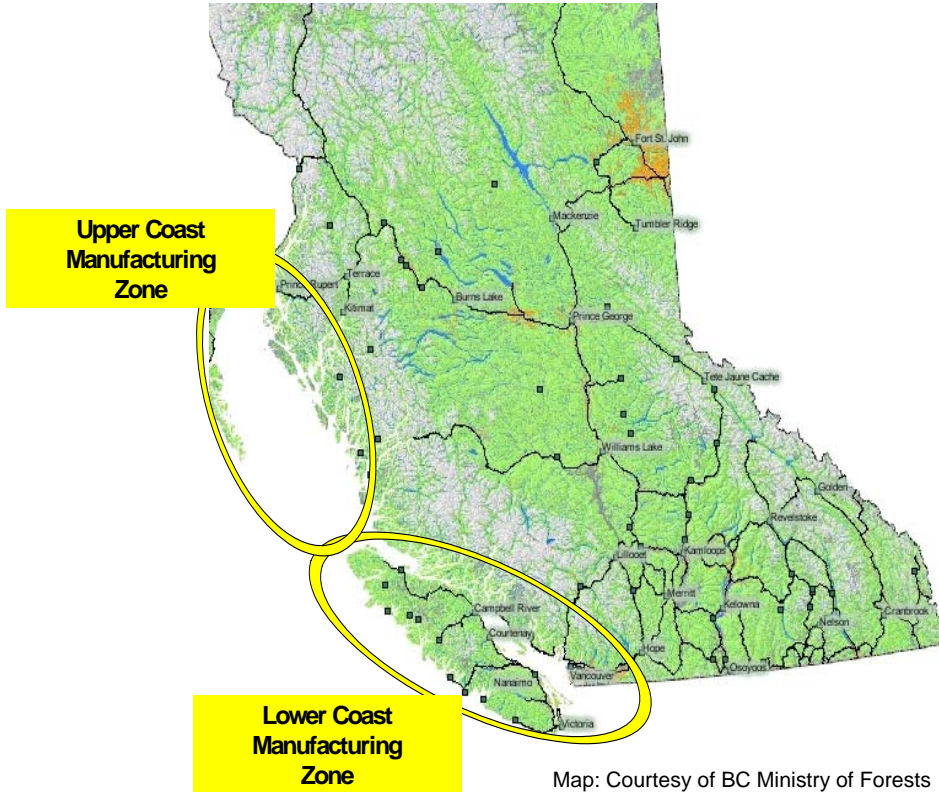
Section 6

BC Coast Wood Product Industry



6: BC Coast Wood Product Industry

Chart 48



Map: Courtesy of BC Ministry of Forests

In 2004, BC's coastal region accounted for 27% of all Crown-owned softwood timber harvested in the province (see earlier Chart 29) and about one-quarter of BC's lumber output, along with other manufactured wood products.

Timber logged from Crown owned forests provides the bulk of log supply to the industry.

Private land ownership (6% of BC's total harvest) is more significant on the Coast than in the Interior. The Coast region accounts for two-thirds of all *private* timber harvested in the province.

The coastal region supports a wide range of timber types, comprising mostly softwoods but also a wide array of medium and high density hardwoods.

Significant commercial softwood species include Douglas-fir, western hemlock, red cedar, yellow cedar and Sitka spruce. Four commercially hardwoods are grown and processed in BC. Red alder and Bigleaf maple grow on the Coast.

The Coast is unique and separated from the Interior—not only geographically and through climate differentiation, but by the following characteristics which directly impact the cost and revenue differences of the region's manufacturing sector.²¹:

- higher-valued species (e.g. cedar, but also some lower valued species such as hemlock);
- ages and grade characteristics of trees;
- product mix and markets;
- geography and land form characteristics;
- lack of roaded areas and long waterborne transportation distances;
- difficult growing sites and bio-geoclimatic variations in many old growth timber areas.

Three coastal areas are typically identified—south, central and north Coast. From the viewpoint of wood products manufacturing, the bulk of activities are located in the Lower Coast manufacturing zone—notably in the Lower Mainland and on Vancouver Island. Log flows along the Coast are southward. Smaller clusters of manufacturing activity (mostly primary breakdown) are located within the Upper Coast manufacturing zone, with an emerging focus on Prince Rupert.

²¹ CFPA website www.coastforest.ca



BC CoastOnce Upon a Time

Photos this page: Courtesy of TimberWest

The rich timber resources of the BC Coast helped establish a forest products manufacturing industry that was global in market scope and world class in competitiveness. Logging (Chart 49) on the Coast is labour intensive and requires a complex network of waterborne transportation (Chart 53) to deliver logs to converting facilities.

Chart 49



Up to the 1980s, coastal wood products, notably from Douglas-fir and cedar, were shipped to Europe, the United States eastern seaboard (using the trade advantage of the US Jones Act), Japan and many other destinations. The economics of the Coast wood product industry were linked closely with the region's extensive pulp and paper sector—producing market pulp and newsprint.

Large volume shipments of pulp and paper to overseas (Chart 52) markets “paid the freight” and made coastal wood product exports viable long after competing products started to nudge the BC Coast wood product industry from a 1st quartile global cost position.

When they lost market share, coastal lumber producers kept their basic product essentially the same (always green lumber), and pursued alternative markets. Green dimension lumber was sold to the US eastern seaboard. Carcassing lumber (1 7/8th inch) was sold to Europe. Large timbers and ‘baby square’ hemlock were exported to Japan (Chart 51). Panelboard production comprised Douglas-fir plywood (DFP) and some reconstituted boards (e.g. particleboard). A vibrant re-manufacturing trade produced products ranging from shakes and shingles, cedar fencing, fir mouldings and a variety of value-added millwork items.

Chart 50



As logging moved to higher ground to find timber, costs began to rise sharply.

Heli-logging (Chart 50) has become the only viable commercial harvesting option in many isolated, hillside logging areas where contractors rely on old growth timber. Decades ago, industry consolidation created some of the most innovative companies within the global industry at that time. Coastal giant MacMillan Bloedel was a pioneer of many of the engineered wood products in use today.

Chart 51



For various reasons, discussed in the next several pages, the Coast industry lost its competitive edge. From the late 1970s, Coast wood products manufacturing began a gradual decline which accelerated after a series of crises hit the region in the 1980s and 1990s.

Much of the fall-out still impacts the Coast today. Most lumber mills now have 4th quartile costs, and suffer from lack of new investment.

Chart 52



Chart 53



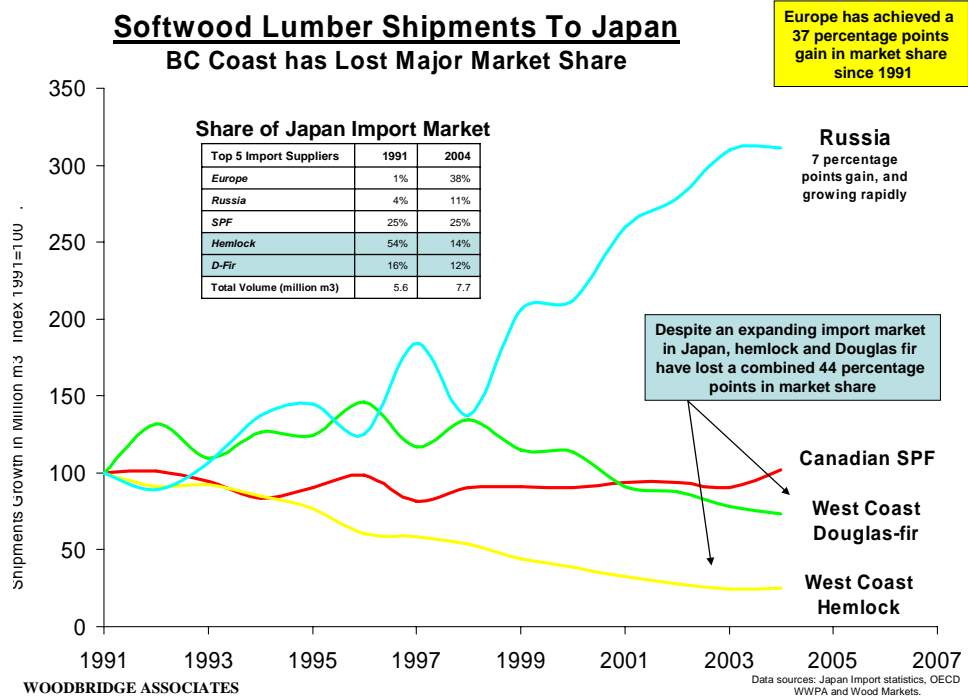


Coast Industry Product-Markets

The Coast manufacturing industry’s current product-market focus is a “work-in-progress”. Historically, the region produced a well-defined product mix (notably Douglas-fir, hemlock squares and cedar). It sold lumber, plywood, shakes and shingles, along with specialty products including architectural timbers, to a variety of markets—but was heavily focussed for several decades on exports on air-dried and green lumber to Japan and other Pacific Rim markets. Log exports have increased in recent years.

Less than 10% by volume of Coast lumber is in 2x4 and 2x6 dimensional products aimed at the US market. Kiln-drying capacity is limited, reflecting the emphasis in Crown timber harvesting towards lower valued hemlock, which is difficult to dry. Shifts in the region’s product-markets aptly define the adverse changes in the industry’s financial health for more than the past decade.

Chart 54



Since 1991, total softwood lumber consumption in Japan (the BC Coast’s major market) has increased from 5.6 million m3 (1991) to 7.7 million m3 by 2004 (Chart 54). In 1991, western North American producers of Douglas fir and hemlock lumber held a 70% share of Japan’s import market. SPF producers (mostly BC Interior) held an additional 25% market share. Overall, the Japanese import market was almost exclusively focused towards North American supply.

By 2004, the situation had changed dramatically. Through sales of mostly J-Grade lumber, SPF producers were able to hold onto their 25% share of the large and important Japanese market. However, Douglas-fir and hemlock lumber producers lost a combined 44 percentage points of market share to Europe (gain of 37 percentage points) and Russia (gain of 7 percentage points, and rising rapidly).

Several factors contributed to the huge loss of market share in Japan by the BC Coast wood products manufacturing sector. They included:

A: Market Factors

- Shift in construction methods and product consumption within Japan, notably after the 1995 Kobe earthquake.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

- Increased preference for dimensionally stable laminated lumber products, increasingly supplied by European manufacturers.
- Decreasing preference among Japanese homebuilders for BC's traditional baby squares hemlock product, which is dimensionally less stable than alternatives (including kiln-dried SPF lumber from the BC Interior).
- Increased level of off-site fabrication of housing components within Japan, favouring European laminated lumber and J-Grade SPF.
- Despite a few spikes in global prices, lower worldwide demand and lower prices for NSBKP market pulp and newsprint led to mill financial failures and machine and/or mill closures. The sensitive balance of inter-dependency of BC Coast wood products with pulp and paper manufacturing began to break down.

B: "Made in BC" Factors

- Failure of Coast lumber firms to adapt their product mix and marketing approach to meet emerging needs in Japan.
- Extremely adverse business climate on the BC Coast (notably the 'war-in-the-woods') which contributed significantly to the decline in capital spending noted earlier.
- Heightened uncertainty due to anti-business and investment-unfriendly practices of the provincial government of the day in BC throughout most of the 1990s. This took the form of extensive regulatory and bureaucratic hurdles to investment throughout the province. But it was focused in particular on land use and environmental issues facing the coastal BC manufacturing industry.
- Table 3 summarizes some of these factors.

Table 3

Domestic Factors Contributing to Declining CAPEX in BC Coast Wood Products Manufacturing	
War in the Woods Investment Uncertainty High Logging Costs High Manufacturing Costs High Costs of Certification Low Woods Productivity Low Mill Productivity Pulp and Paper Decline on Coast Poor Labour-Union Climate 19th Century Labour Union Attitudes 19th Century Management Attitudes Attitude of "Entitlements" Chronic Unprofitability Inadequate Return on Capital (ROCE) Social Policy Driven Tenure Changes	Small Business Program (unsuccessfully trying to change manufacturing structure through tenure re-allocation) Forest Practices Code, Unwieldy & Costly Investment Outflows Cash Flow Crises Rising Stumpage and other costs Unfriendly-to-business Government in 1990s 4 Year MPRP Investment Reviews Takeovers/Mergers disallowed 'BC Discount' imposed by capital markets Unresolved Land Claims, no Resolution Process Land Use Issues Environmental conflicts Environmental groups lobbying BC's customers saying "don't buy BC products"

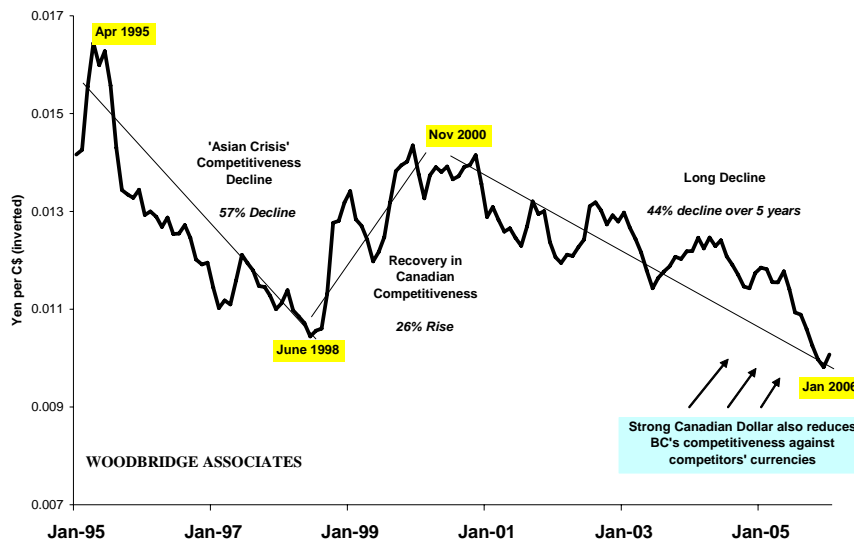


Loss of Currency-Induced Competitiveness

All exporters of wood products to Japan were hit by the mid-1990s ‘Asian Crisis’. For BC Coast producers, who were already losing market for the reasons outlined, the currency exchange effect was yet again another adverse factor. There was a sharp currency-induced loss of competitiveness between April 1995 and June 1998. Subsequently, exchange rate conversion worked in the Coast’s favour for a time. But since November 2000, to date, the strong Canadian dollar against the Yen (Chart 55) and several competitors’ currencies, has contributed to a further loss of currency-induced competitiveness.

Chart 55

Currency-Induced Rise & Decline in BC’s Competitiveness in Japanese Market



Lack of Market Alternatives

Loss of BC Coast industry market share in Japan (the largest consuming region for the BC coastal industry’s wood products output) overlapped a period of time when (a) the US-Canada Softwood Lumber Agreement (1996), through the allocation of supply quotas, effectively precluded coastal lumber producers from pursuing the increasingly ‘hot’ US market and (b) the mid-1990s Asian economic crisis and trade down-turn occurred.

Failure of the P3

The failure, on the Coast, of the P3 model.²² of governance was one of the structural factors that subsequently:

- (a) prevented a market-driven rationalization.²³ of excess coastal lumber production capacity;
- (b) inhibited industry from “re-sizing”; and
- (c) delayed the establishment of a sound footing for coastal industry turnaround and renewal.

²² See Section 4 for description of the history of the P3.

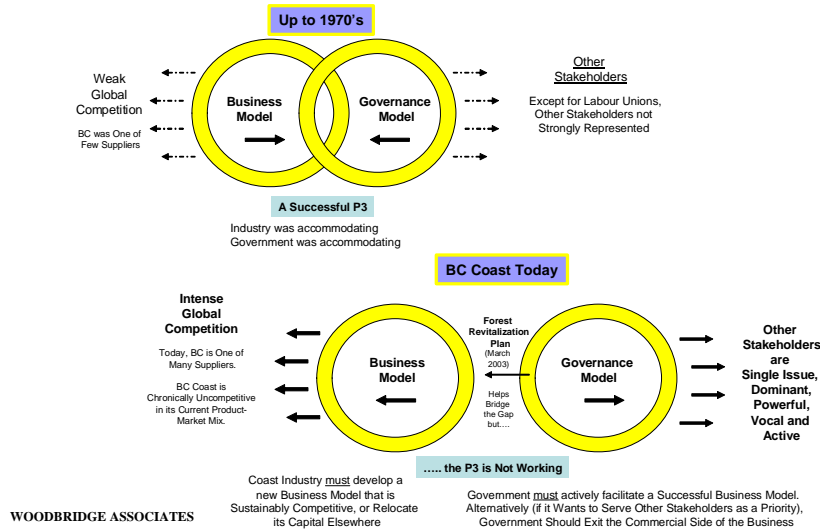
²³ e.g. the government of the day imposed rules on merger and acquisition activity, and discouraged consolidation and rationalization of manufacturing capacity.



Chart 56

Among the World's Leading Wood Product Manufacturers, BC Has a Unique Model of Governance

BC's Formerly Successful 'Crown Timber-Private Investment' Public Private Partnership (P3) is No Longer Viable for the BC Coast
 (But is Still Working in the BC Interior)



WOODBRIIDGE ASSOCIATES

Up to the 1970s, the P3 model worked well for the BC Coast wood product industry. The convergence of industry business models with the province's mode of governance of the Crown timber estate (Chart 56) worked well for both partners. Conditions were conducive to this success. The BC Coast was one few suppliers to large global markets. Apart from powerful trade unions, few other stakeholders in the forest sector had much influence at the time. Industry was accommodating and government ministries were business focussed. It was a successful P3.

Breakdown of the Coast P3 Relationship

Various changes made the coastal P3 increasingly less effective during the 1980s, and beyond. The Coast wood products manufacturing industry gradually lost competitiveness in major export markets. The quality of Crown timber declined, and log sizes became smaller. Direct and indirect costs of manufacturing increased sharply. Traditional business models no longer worked for industry firms.

The Ministry of Forests and other ministries shifted their focus and *modus operandi* to deal with the growing number of vocal, increasingly powerful and less friendly to business stakeholders. Environmental and land use issues became paramount day-to-day concerns. Ministry goals and service plans were revised to deal with increasingly multi-stakeholder, multiple-use issues.

During the 1980s, take-backs of Crown timber from licensees were introduced in BC. These created a quantity of timber that was reallocated to other licensees under a small business program. Significant additional take-backs were made again later. In the 1990s, an extensive array of regulations was imposed to control logging and harvesting practices, and to require multi-stakeholder involvement in land use, harvesting and forest management planning. Commercial activities were slowed or stopped. Permitting procedures increasingly became bogged down in red tape. Mills began to shut down. Jobs were lost and capital began to exit from the province's forest sector. The coastal industry P3 fell apart.

March 2003 Forest Revitalization Plan

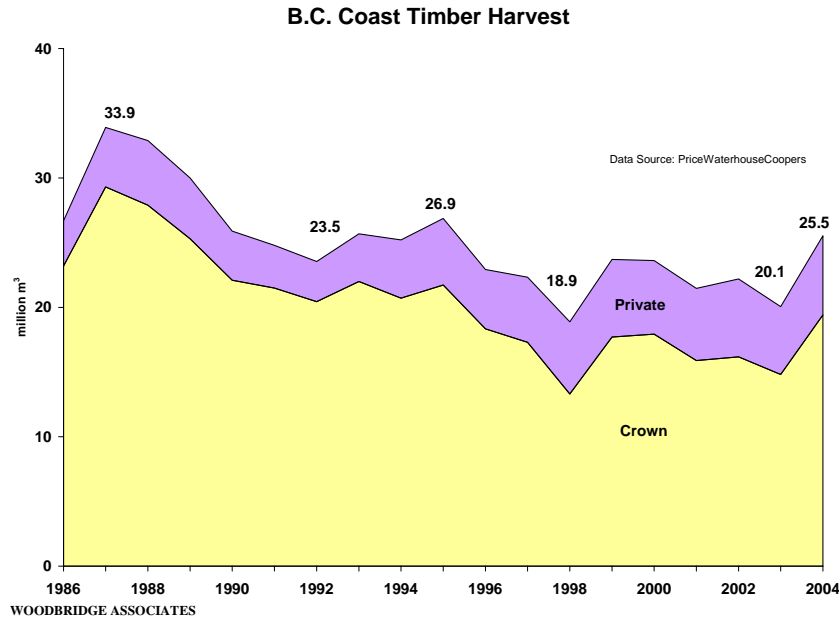
In 2001, initiatives were introduced to reduce the bureaucratic burden of over-regulation and to allow BC forest industry firms to rationalize and re-position their operations based on market forces. These culminated in the March 2003 introduction of Forest Revitalization Plan. The Plan has brought about substantial, changes in the sector. Many are beneficial to the industry. Others are costly to it. The Plan is still a work-in-progress. On the BC Coast, a lot more structural changes remain to be made.



Low Harvest Levels

For many years during the 1990s, PricewaterhouseCoopers routinely reported that the Coast allowable annual cut (AAC) on Crown lands was being undercut. This situation has continued to the present day. Chart 57 shows the trend in timber harvested on the Coast since the mid-1980s. From a harvest level of nearly 34 million m³ in 1987, the harvest level declined by 15 million m³, or nearly 45%, by 1987. By 2003, the harvest level had recovered—but part of this volume was due to increased harvesting of private timber. Crown timber harvesting recovered sharply in 2004 to 25.5 million m³.

Chart 57



Sawlogs v. Pulplog Consumption

The coastal timber harvest shown in Chart 57 includes sawlogs and pulplogs. Most of the volume is processed by the domestic industry, but part is exported in roundwood form (see Chart 59).

There are more than half a dozen active chipping plants on the BC Coast—which are important for continuity of hemlock chip supply to the region’s pulp making industry. The economics of extracting pulpwood, however, have deteriorated as the process of sawmilling capacity downsizing continues.

Plywood, Veneer and Engineered Wood Products

In 2005, Coast sawmills, veneer mills and chipping plants consumed nearly 17 million m³ of timber²⁴. Nearly three-quarters of this was processed in local sawmills. Veneers produced for plywood and the LVL industry are manufactured by Coastland, CIPA and Richmond Plywood.

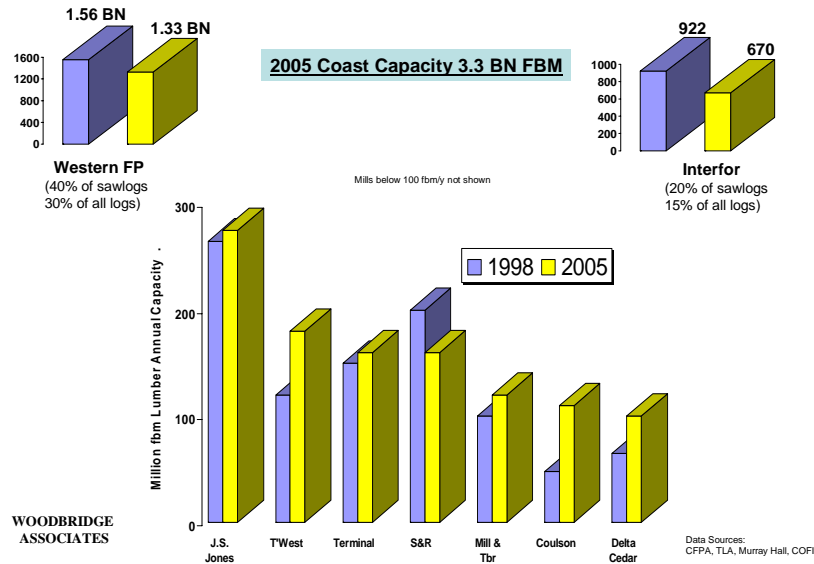
Coast Lumber Industry Consolidation

Recent consolidation in the industry has led to significant concentration of manufacturing capacity in the hands of two firms—Western Forest Products and Interfor (the latter has been divesting from BC and investing in the US Pacific Northwest). The two firms currently account for over 60% of BC Coast lumber manufacturing capacity (Chart 58).

²⁴ Estimate for Truck Loggers Association (TLA). Includes imported logs.



Chart 58
BC Coast Lumber Capacity 2005 (Active Mills)



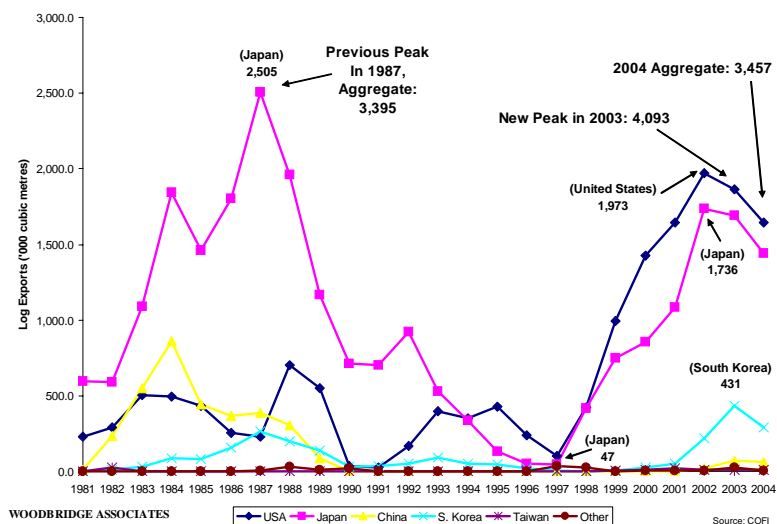
There are seven other firms with active mills producing (in aggregate, by firm) in excess of 100 million board feet annually. Most of these are comparatively small by BC Interior standards.²⁵ Several firms have specialty mills that each produce 50 to 100 million fbm annually, or less. Numerous smaller mills exist along the Coast region. The only new sawmill built on the Coast in recent years was JS Jones' small log mill in Surrey (165 million fbm annual capacity).²⁶

Log Exports

BC's logs exports by country of destination are shown in Chart 59. Log exports increased significantly during the 1980s to reach a peak of nearly 3.4 million m3 in 1987. They declined sharply for the next decade, reaching a low point in 1997. A recovery in the Japanese import market, along with significantly increased log exports to the United States, led to a new recent peak of nearly 4.1 million m3 by 2003. Global log markets are highly competitive. Numerous suppliers exist worldwide. BC's aggregate volume of log exports, mostly from private lands, declined to around 3.5 million m3 in 2004.²⁷

Chart 59

BC Log Exports by Country of Destination



²⁵ See Chart 36.

²⁶ Also see Chart 7.

²⁷ Log exports from the BC Interior are small in volume.



The Current Situation on the BC Coast

The Forest Revitalization Plan has improved operating and business conditions for the industry. In the meantime, however, additional (mostly global) factors have further shifted the competitive landscape against the BC Coast. A paradigm shift is occurring in supply, demand and trade patterns in the forest products sector.

New supply areas have come on stream. Countries such as China and Russia had only limited involvement in world trade a decade and a half ago. Increasingly they, and many other new supply areas, are becoming dominant players in trad—and in attracting new investment. BC has to compete very hard just to survive.

Various additional factors such as the rising value of the Canadian dollar in US funds and the US-Canada softwood lumber trade dispute have shifted competitiveness away from traditional supply areas such as BC.

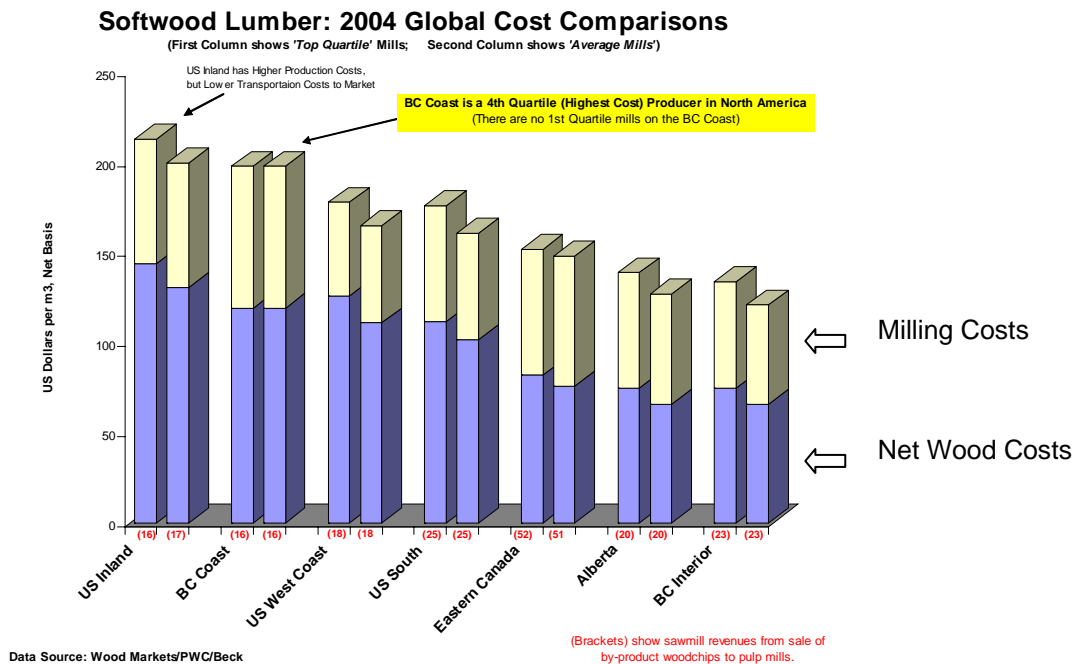
BC Coast Competitiveness

Based on the Wood Markets/PWC/Beck global production cost survey referred to earlier, analysis shows that the BC Coast sawmilling industry today is one of the highest cost sawmilling regions in North America. Adjustments to comparative cost rankings have to be made to account for differences in product-mix and average revenues received per unit sold.

In this context, the BC Coast typically commands average sales revenues per thousand board feet roughly double those of SPF from the BC Interior.

But even with these adjustments, the BC Coast region lumber industry does not compare well with other regions it competes against. US Inland lumber production costs, based on the survey data, are higher—but these mills are closer to their natural markets and enjoy lower transportation costs than most BC Coast sawmills.

Chart 60



High Net Wood Costs

In Chart 60, wood costs are shown net (i.e. including credits of income from chip residuals). Within North America, net wood costs are highest in the US Inland region and the BC Coast. Sawmill residual income is similar for both regions. As already noted, residuals income on the BC Coast is declining—and further increases in net wood costs are likely as the Coast pulp and paper industry resizes.



Conversion Productivity

High wood costs have to be offset in part through high levels of product revenues. In sawmills, lumber recovery factors are an important indicator of the efficiency of conversion. The BC Coast region has low LRFs and low productivity.

High Labour Costs

Milling costs for BC Coast sawmills are higher than in any other area of North America. One of the major reasons is the region's very high labour costs. High labour costs on the Coast are not offset by high labour productivity. Along with net wood costs, high labour costs are the major sources that lumber production on the BC Coast is uncompetitive.

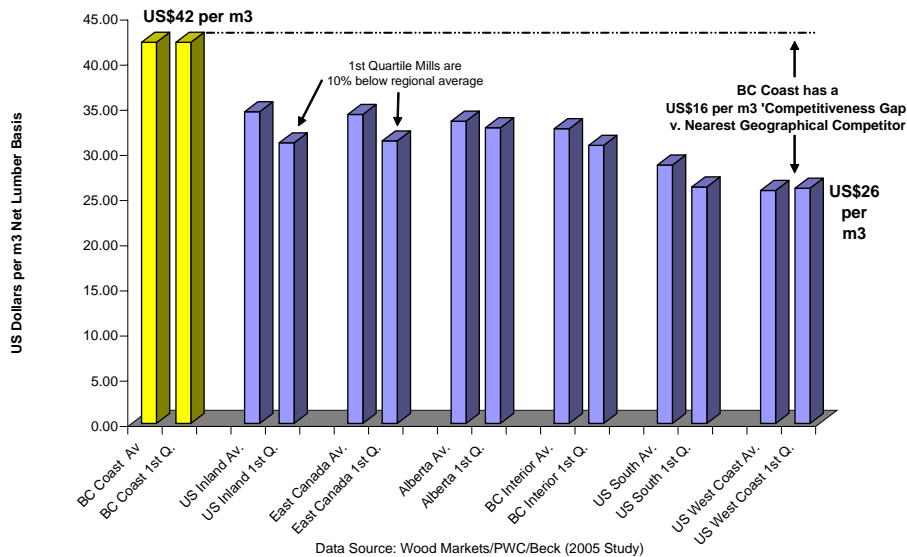
BC Coast Labour Costs per Unit

BC Coast sawmill labour costs are not just out of line with North American and global averages, they are substantially above all of the regions competitors. Moreover, as noted below, BC Coast mill labour productivity is low compared with other areas.

Chart 61 shows that mill labour costs on the BC Coast in 2004 were an estimated US\$42 per cubic meter in 2004. This was around US\$8 per m3, or 20%, above the level of average mills in the US Inland region. The US West Coast.²⁸ region had labour costs of US\$26 per m3 in the same year. This was US\$16 per m3, or 38%, below those of the BC Coast.

As already noted, mill labour costs typically account for around more than 50% of sawmilling costs, and between 15% to 20% of total manufacturing costs. So the 38% cost difference is a substantial competitive disadvantage for BC Coast sawmillers.

Chart 61
BC Coast Lumber Manufacturing:
Labour Costs are the Highest in North America



To be able to compete successfully with competitor mills in their existing product-market mix, BC Coast sawmill labour costs would have to be reduced substantially—close to the 38% difference shown above.

BC Coast sawmill labour costs are 38% higher than the region's nearest geographical competitor

²⁸ Also referred to in this report as the US Pacific North West, or PNW, region.



This percentage could be reduced if BC Coast lumber mills were to become significantly more efficient and productive. Based on recent new investment into small log mills in the US west coast, mills in this competing region are improving their productivity at a fast rate. Competitiveness on the BC Coast can only be improved significantly by (a) substantially lower labour costs and benefits and (b) significant capital spending by BC Coast firms in state-of-the-art, modern and highly efficient new mills and equipment.

Impacts of Coast Pulp & Paper Industry Downsizing

The vital importance of by-product revenues to the viability and survival of sawmills throughout BC has already been emphasized. As the Coast industry “re-sizes” old relationships are changed. For sawmills, the loss of residual chip income is a significant financial issue. On the Coast, the recently announced closure of Western Forest Product’s Squamish pulp mill will result in further reduced net demand for fibre. Declining SPF chip prices, and increased utilization of SPF chips by coastal pulp mills (there are product-driven limitations to species substitution) also are resulting in lower by-product revenues for coastal sawmills.

As the coastal pulp and paper sector re-sizes to reach a new, lower critical mass (see Pulp & Paper IAC report), the logistical and financial inter-dependency of these sectors becomes even more evident. The resulting cash flow pressures on the coastal sawmilling industry make it intensely important for sawmilling firms to find ways to reduce costs. But the pulp and paper industry also has to restructure. Fibre supply agreements (fibre off-take agreements) between pulp makers and fibre suppliers are commercial arrangements that require private sector resolutions.

Competitiveness Issues Facing the BC Coast Wood Product Industry

Numerous issues combine to define the competitiveness of the coastal wood product industry.²⁹ Key issues, in random order, include the following:

- Financial losses are unsustainable. Labour costs are excessive. The Coast industry’s return on capital employed (ROCE) is chronically poor, and is well below the cost of capital. In its current configuration, the Coast sawmill industry is dying;
- Land claims and land use issues continue to create huge uncertainties for investors. First Nations participation in the industry should be an ongoing priority;
- The Coast AAC significantly and consistently exceeds harvest levels. The resulting under-utilization of the allowable cut has numerous adverse impacts on the sector. These are not just financial issues. Woods safety is a critical issue and is being addressed aggressively;
- All product-market solutions identified for the Coast industry involve unfettered access to the US softwood lumber market;
- Product-market solutions for the Coast would require a substantial reduction in operating costs if the substantial capital (CAPEX) required for new mills and re-builds (in excess of \$1billion in wood products manufacturing alone) is to be attracted successfully;
- In common with the BC Interior industry, the Coast industry wants an acceleration of the transition to market-based pricing, and to ensure that this reflects market factors. BC Timber sales must become *significantly* more effective (effective log merchandizing, commercial classification and market sales, along with market-based pricing of Crown timber also is a goal of the Interior industry);
- Log exports from private timberlands are restricted under federal Notice 102, and are limiting the scope for the Coast industry to implement a healthy turnaround in earnings;
- Growth in secondary processing (‘value-added’) of wood products in the BC Coast region is being restricted by the lack of a stable, profitable and expanding primary wood products sector;

²⁹ For further comments on competitiveness issues, see Section 3.



BC COMPETITION COUNCIL

Wood Products Industry Advisory Committee

- Investments in the Crown land base supporting the manufacturing industry are well overdue. New innovative tenures are needed to help attract private sector capital, and to attain higher levels of forest management;
- Ministry of Forests strategic goals, and the implementation of its policies, are not supportive of business –and are often hostile to logging and manufacturing sectors. Non-stumpage costs are high and pervasive throughout the coastal region. Levels of regulation and ‘red-tape’ are lower than formerly, but remain substantial and excessive.

In addition, the Committee has identified a wide range of other issues which, although not necessarily critical to the industry’s ability to carry on its immediate business, will have increasingly significant effects over the short, medium and longer term competitiveness of the BC Coast industry under the proposed turnaround plan. They include such issues as:

- Lack of research and development spending. A “paradigm shift” is taking place globally in the forest products manufacturing sector—creating massive and ongoing changes in competitiveness rankings internationally. Responding pro-actively to these shifts requires that traditional supply regions, such as BC, have to identify and pursue product-market strategies that invariably require significant expenditures on product and process innovation.

In BC, few private R&D facilities exist to support these efforts. Quasi-public organizations, such as Forintek, receive industry and government funding and provide valuable R&D and technology transfer services to the industry. But, overall, the BC wood products manufacturing industry lacks a culture of innovation.

Twenty years ago, this was not the case. MacMillan Bloedel (MB) and Canfor operated significant proprietary research facilities. MB achieved a world leadership position in the 1980s by pioneering and developing new generations of structural engineered wood products (e.g. TrusJoist). Today, that leadership resides elsewhere.

- Market Promotion. The BC Coast industry has participated in a variety of market promotion and market diversification initiatives. COFI, the CFPFA and other trade associations are active in identifying new markets and trade opportunities. Provincial and federal initiatives emphasize the importance of trade missions to potential and diversified new markets (e.g. trade with China). However, within the BC wood products manufacturing industry, the business focus predominantly is on *volume production*. Few firms make use of, for example, SR&D funding to introduce innovation.
- Skills training and trades training. Within BC, expenditures on post-secondary education (P2E) and skills training have risen sharply as a matter of government policy. Service providers, such as BCIT, UBC and UNBC work closely with industry to provide remote delivery of skills upgrading, trades training and management services. However, there is a skills shortage in many occupations and new entrants are not being attracted to the industry.
- Investment attraction. This is a significant challenge for the BC Coast wood product industry. It will not be sufficient for the region merely to “catch up” with its competitors. The region has lost a lot of ground and credibility with its traditional customer base, notably in Japan. Even with the new business models pre-viewed in this report in place, Coast firms will need to work exceptionally hard to re-position themselves as reliable suppliers. Supply relationships have been lost through complacency and neglect. It will be important for firms within the region to establish a long term view, and invest internally in supporting cultures.

Discussion of BC Coast Priority Issues

Issue: Financial Losses are Unsustainable

A significant part of the substantial competitiveness gap suffered by the BC Coast sawmilling industry is attributable to its low productivity. This occurs in many areas of operations, ranging from contract logging to manufacturing. Industry firms place a high priority on trying to implement innovative solutions. But, invariably, these involve *incremental* changes when, in fact, fundamental re-structuring is required.



Phrases such as “it’s chicken and egg situation” or “it’s a ‘Catch 22’ situation” are common responses in discussions of coastal wood products manufacturing productivity—notably in primary sawmilling. The fact is that, whatever the causes, financial results for the majority of BC Coast lumber manufacturing operations are consistently poor, or negative. ROCE is abysmally low. In its current business models, and with the prevailing model of P3 governance, the Coast sector will remain chronically unprofitable.

The solutions offered by the Committee propose a dramatically different operating environment (see ‘Committee’s Recommendations for the BC Coast’) from that which has prevailed in the recent history of the BC Coast industry.

As background to the analyses presented later in this report and the Committee’s proposal, it is useful to review current and recent trends in productivity.

Low Levels of Labour Productivity

The productivity of labour is intricately tied to several factors, including the manufacturing firm’s level of spending on capital equipment. A ‘best practices’ example is provided by the BC Interior SPF industry. Other important productivity factors include workers’ experience, training, rules in the work environment and motivation. On a per-hour of labour basis, studies show that the BC Coast sawmilling industry has a much lower level of labour productivity than southern Interior sawmills and a substantially lower level than most northern Interior sawmills. In 2004, BC Coast sawmills averaged an output of 326 fbm/hour (Chart 62).

On a nominal basis, this performance was only 40% as productive as BC northern interior mills, on average.

Coast mills have operated well below capacity for several years (Chart 63). This has a major impact on unit costs of production—and many other aspects of financial performance.

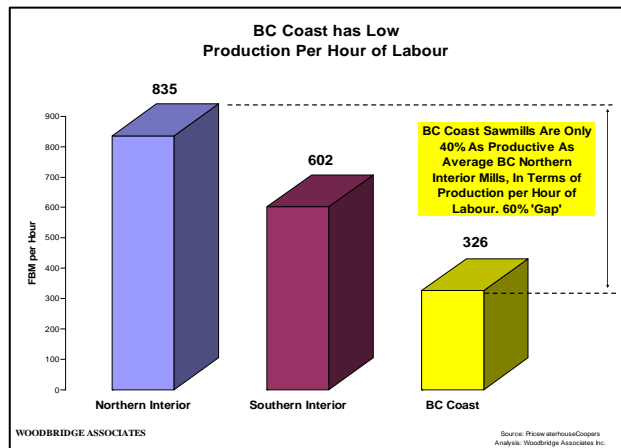
Issue: High Mill Labour Costs are Excessive

The high cost of labour cannot be sustained if the proposed BC Coast turnaround plan is to succeed.

Issue: Land Claims and Land Use

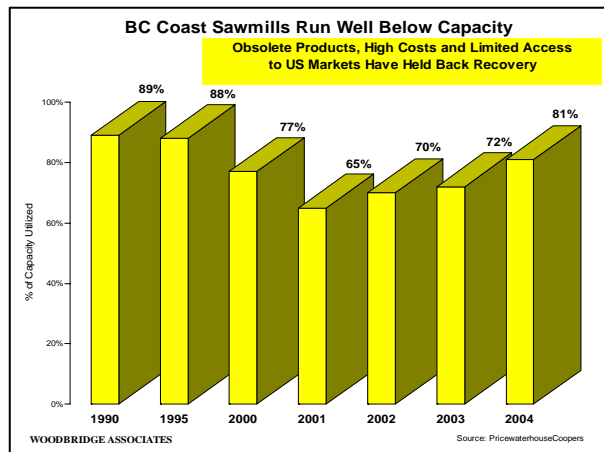
Numerous studies and assessments have concluded that these issues continue to create huge uncertainties for investors. In view of the large amounts of private sector capital that will be required to position British Columbia’s forest sector competitively in global market during the balance of the 21st Century, it is imperative the current high level of uncertainty continues to be addressed urgently—and from a business investment perspective.

Chart 62



Consistently low levels of capacity utilization have a substantial and negative impact on unit costs

Chart 63





Issue: First Nations Participation

The industry fully supports³⁰ the general intent of the provincial government's *New Relationship* initiative with BC's First Nations peoples. As numerous industry leaders have stated, it is essential for First Nations to participate actively in the evolution of the province's forest sector. Within BC's forest sector, there are many 'best practice' examples of successful First Nations enterprises. More of these need to be pursued.

Since September 2002, the Minister of Forests has signed agreements with 99 First Nations to provide access to over 15.7 million cubic metres of timber (about 20% of the province's harvest) and to share forestry revenues of \$114.5 million³¹. From the perspective of the industry's global competitiveness, the outcome of the *New Relationship* with First Nations is that this process should ensure for the industry:

- greater economic and cost certainty;
- increased predictability for investment;
- certainty of access;
- respect for tenure rights and capital investment;
- assured timely approvals of plans and permits.

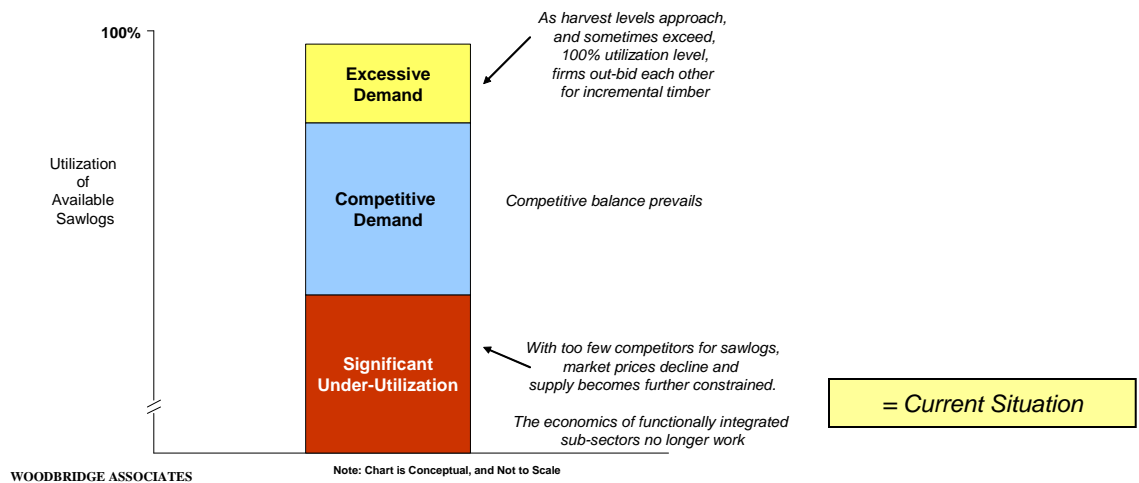
The scope of the application of the *New Relationship* to forest industry activities, including consultation and accommodation, must be consistent with evolving Aboriginal law and must respect the contractual and legal obligations the Crown has with licence holders. Shared decision-making must also be consistent with the law and not provide First Nations with veto powers or interfere with licensees' ability to exercise their rights and run their businesses.

Issue: Harvest Below Allowable Cut (AAC)

For more than a decade, the coastal Crown timber undercut has been one of the major conundrums facing the industry and government policy makers.

Chart 64

**Lumber Production on BC Coast
 is Below its Sustainable 'Critical Mass'**



From industry's viewpoint, the meltdown of wood products manufacturing capacity on the Coast over many years has now reached a position where the 'critical mass' has fallen below the level where a viable, inter-dependent and globally competitive sawmilling industry can be sustained (Chart 64).

The undercut has numerous impacts. Apart from the obvious and very important loss of stumpage revenues to the Crown, under-utilization of the allowable cut contributes to:

³⁰ See CFP website www.coastforest.com and COFI website www.cofi.org

³¹ Source: Ministry of Forests and Range January 2006



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

- Under-utilization of logging contractors and their resources (e.g. “lurch logging”);
- Under-utilization of numerous service providers, and coastal infrastructure;
- High costs of logging;
- Lumber manufacturing capacity utilization levels below 70%;
- High lumber manufacturing costs;
- Under-achievement by BCTS of Crown timber sales, fewer transactions and weaker market pricing signals;
- Lower community income;
- Higher fixed cost burden (e.g. property taxes) for remaining producers;
- Loss of customer confidence that BC Coast sawmills will be in business over the long term.

Ramp Up-Ramp Down

‘Critical mass’ is not usually a concern for individual firms, or for the industry. However, it becomes an issue when an industry is downsizing—notably, when the process of rationalization alters or destroys the economics of integrated operations developed during the sector’s expansion or ‘ramp-up’ phase.

The current situation regarding sawlogs on the BC Coast is that the sector most likely is now in this phase. This is common in regions where a ‘last man standing’ stage of downsizing and correspondingly low levels of utilization have occurred.

If private timberlands supplied most or all of the sawlogs needed by the sawmilling sector, resolution of this situation would be a purely market-driven private sector affair. However, on the BC Coast, where Crown timber still provides the bulk of aggregate timber supply, tenure rules allow wide scope for lower levels of Crown timber utilization.

Highly restrictive “use-it-or-lose-it” rules, which existed in BC for many years, were removed through implementation of the Forest Revitalization Plan in March 2003. There was a lot of common sense behind this decision. Under the old arrangements, licensees’ harvesting obligations were often out of step with cyclical markets. Under the Committee’s proposed turnaround plan for the Coast industry, the availability of second growth timber from existing licence areas will be a factor that needs to be resolved in attracting new investment to the Coast.

Issue: US Market Access

The new product-market mix generally envisaged by the industry as a solution for the Coast sawmilling industry will require full and unfettered access for BC coastal producers to the US lumber market.

Issue: Substantial Reduction in Operating Costs

Earlier analysis has indicated that BC Coast sawmills were 4th Quartile (i.e. highest cost) producers during 2004, on a North American regional comparison. In relation to traditional competitors, the rising value of the Canadian dollar and rising transportation cost differentials, most likely have pushed BC Coast sawmills into an even more unfavourable position during 2005/early 2006.

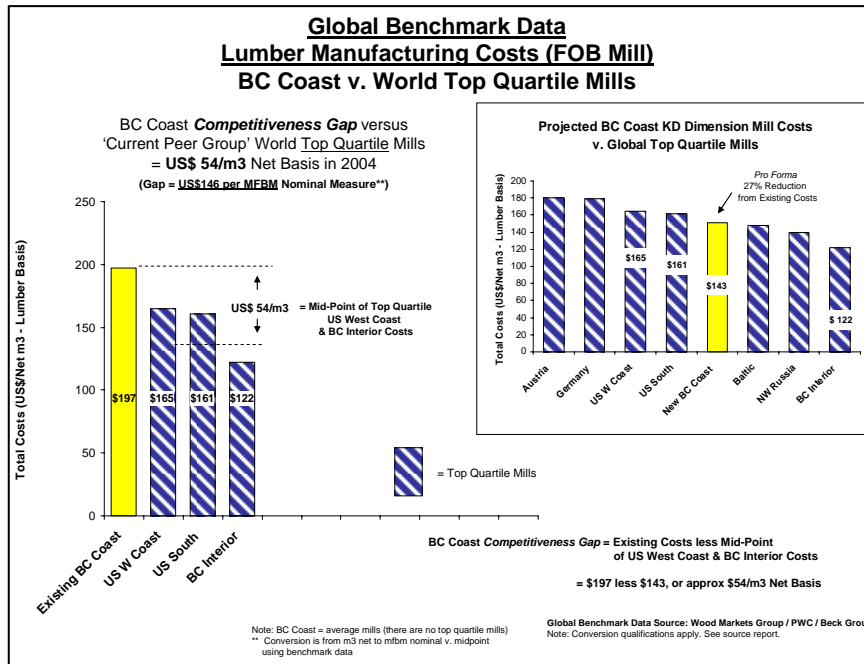
BC Coast Competitiveness ‘Gap’

The Coast’s competitiveness gap in the new product-market mix envisaged for the region is estimated to be around US\$54 per m3 on a net basis.³² In nominal lumber terms, this is estimated as being around US\$146 per mfbm (Chart 65).

³² Based on net basis data provided in the Wood Markets/ PWC/ Beck Group 2004 data study. Calculations are based on the difference between existing (i.e. 2004) BC coast sawmilling costs and a midpoint of top quartile US West Coast and BC Interior costs. It is hard to imagine that any capital providers would be interested in investing in a new sawmill on the coast (based on the product-mix already outlined) unless the proposed enterprise could compete in the same (US) markets with these alternative supply regions.



Chart 65



This calculation approximates the difference between existing (i.e. 2004) lumber manufacturing costs of (i) average sawmills located on the BC Coast and (ii) the regions (US West Coast and BC Interior) that would be the BC Coast region's new peer group of competitors under the product-market mix strategy envisaged for a successful turnaround.

Chart 65 also shows the *pro forma* net position of the 'new' BC Coast industry based on the assumption that a 27% cost reduction target (US\$54/m³) is met. In this report, the Committee has identified areas of operating costs where potential exists for cost reductions (see Chart 73).

Issue: Accelerated Transition to Market Based Pricing

As part of the *Forest Revitalization Plan* implementation, an expanded market-based pricing system was implemented on the BC Coast in 2003 to provide a transaction-evidence-based *Market Pricing System* (MPS) mechanism.

In the view of the Committee, this system requires updating to reflect current market conditions and new forest policies. In the Committee's view, the update must review key issues such as:

- BCTS' timber pricing policies and procedures (zero bid sales, profile of sales);
- Export policy changes (fee-in-lieu tax);
- Data set representativeness, refinement and selection;
- Equation variables;
- Model equations;
- Adjustments to reflect differing management responsibilities and development costs between competitive and non-competitive tenures.

Issue: Role of BC Timber Sales

The alternatives to achieve more effective management of the BCTS include corporatization (i.e. Crown Corporation) or privatization. In either case, it is essential for the BCTS, which is now the largest tenure holder in the province, to become significantly more effective than it is at the present time.



Issue: Safety

Woodlands and mill safety receive high profile, and this has increased with the large number of fatalities over the past year. Through programs such as *'The Cost of Unsafe'*, the industry is addressing many of the underlying causes and is committed to instilling a culture of safety throughout the sector. The BC Forest Safety Council is spearheading these initiatives.

Associations such as the CFPA are working with the BC Forest Safety Council, the government and the Truck Loggers Association in defining an action plan that will create an accountability framework that delivers safety on the ground and ensures that workers return home to their families. It is practical and does not point fingers, nor does it blame external factors or make claims based on perception rather than fact. It is based on tangible actions that will lead to safe work and to working safely.

There are five elements in the plan.³³:

Firstly, all companies eligible to work in the industry must be registered and maintain their status as a *Qualified Company*—which means they have demonstrable safety programs and processes in place and are actively and consistently applying these programs.

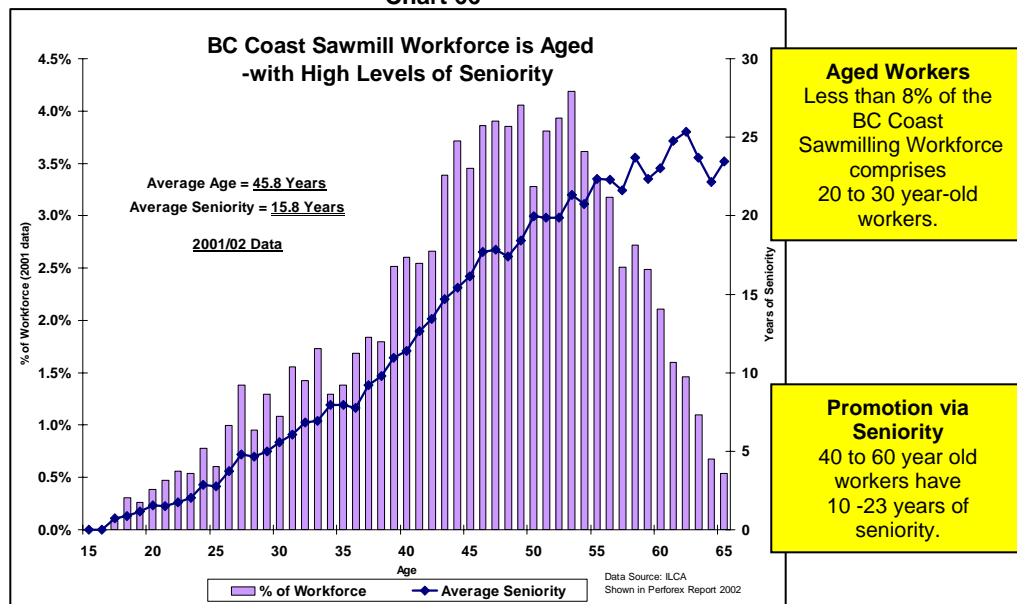
Secondly, there is a need to define shared responsibility in a manner that clearly defines the safety roles, responsibilities and accountability from the boardroom to the forest. There can be no ambiguity in this regard.

Thirdly, there is a need to appoint a safety ombudsman function that provides a 'safe' mechanism for individuals and contractors to report safety issues and allow re-assessment or resolution of these issues without fear of retribution.

Fourthly, all participants need to embrace the WorkSafe BC Forestry Compliance Strategy to ensure it works and includes a role for safety advocates—qualified people who can provide on the ground assessments, audits and training services, thereby directly providing safety programs and procedures to myriad firms that require assistance.

Fifthly, these advocates have to be able to assist companies of all sizes with implementation and auditing of required safety programs. And, though politically incorrect, the sector needs mandatory drug and alcohol testing programs.

Chart 66



³³ Source: CFPA



Issue: Skilled Labour Shortages and Post Secondary Education (P2E)

Human resources and workforce issues are some of the most important structural elements that define a sector's global competitiveness. For the BC Coast region, these issues are potential "show-stoppers" that could de-rail collective efforts by stakeholders to implement a turnaround plan on the BC Coast. Several issues are involved.

Aging Workforce

Like workforces in many sectors of the economy in developed western nations, the Coast wood product industry workforce is aging. A 2002 study showed that the average age of workers in the Coast sawmilling industry was 46 years (Chart 66). In 2001/02, less than 8% of the Coast sawmilling workforce comprised persons in the 20 to 30 years old age bracket. Most workers were in the 40 to 60 years old age bracket.

The turnaround plan proposed for the BC Coast industry by the Committee assumes that human resources and skills training issues will be a vital part of a multi-stakeholder dialogue going forwards. Key issues for action will include identifying the occupational and management training needed by the new Coast industry.

BC Coast Turnaround Plan

Various solutions have been proposed to resolve the lack of competitiveness of the BC Coast wood products manufacturing industry. In fact, not all of the region's manufacturing activities are uncompetitive. Viable businesses in the region already produce an array of products ranging from plywood and veneers to secondary processed wood products. In addition, several production facilities are based on processing of hardwood species. But the health of the sector is defined by the competitiveness of its primary breakdown activities—notably softwood lumber production. Despite recent revitalization initiatives, these dominant activities are chronically uncompetitive.

Three Scenarios

The Committee has developed three scenarios that indicate possible outcomes for the BC Coast wood products manufacturing sector. They are:

Scenario #1 Continue "As Is". This has been dubbed the "*death by a thousand cuts*" scenario.

Scenario #2 Radical Change. With bold and radical changes, the Committee believes that a Coast industry turnaround can be successfully achieved.

Scenario #3 "Big Bang". Experience in several other jurisdictions shows that market forces ultimately will force a fundamental re-structuring of the forest economy—but this has involved extensive mill closures and job losses (US Pacific Northwest wood industry P3 failure) and/or privatization of the timber resource (New Zealand).

Scenario #1

If the industry continues on its current trend, BC Coast operating costs will remain uncompetitive, financial losses will continue and investment uncertainty will prevail. There will be further mill closures and job losses. As the Coast sawmilling industry downsizes, it is falling below the critical mass required to support BC's pulp and paper sector. Fragmentation of the Coast industry will lead to further deterioration. The prospects for the Coast to return to global competitiveness, based on existing business models, are not encouraging.

Scenario #2

Many assessments (see below) have concluded that the Coast region has the resources to support a world class wood products manufacturing industry. Scenario #2 assumes that BC Coast stakeholders, ranging from industry to labour unions and government, will be willing to commit to a turnaround strategy.

The lessons from chronic failures of uncompetitive industries around the world suggests that, left to market forces, regions take a long time to recover once they have become fundamentally unattractive to investors. The turnaround strategy for the Coast assumes that, with pre-emptive action, this can be avoided.

Scenario #3

The factors that result in this scenario are largely out of the control of stakeholders in the BC Coast forest industry. The outcome is that public timber remains substantially underutilized, mills are shut, workers lose their jobs, families move away, communities suffer, the environment is put at risk and opportunities to bring



social and economic benefits to the region are lost. The US Pacific Northwest wood industry P3 failure in the mid-1980s took nearly twenty years to resolve itself.

The Committee believes that this scenario on the BC Coast is avoidable and merits the radical changes outlined in the proposed *Turnaround Plan*.

Recent History of Proposed Solutions

Within the past five years, a number of solutions have been proposed, or initiatives undertaken, to deal with the BC Coast situation.

Pearse Report

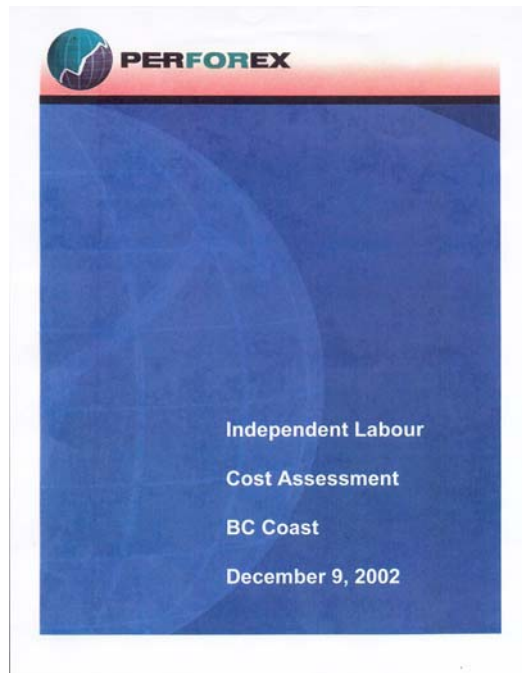
Former royal commissioner Peter Pearse’s 2001 report on the Coast industry documented the progressive deterioration of the industry. His report noted that the vast forests of the BC Coast are capable of sustaining a healthy industry. The report did not make recommendations for changes to solve the industry’s problems, but concluded that continuation of its poor financial performance was unsustainable.

Perforex Report

In 2002, Perforex carried out an independent analysis of labour costs on the BC Coast, and identified significant potential labour cost savings relating to better utilization of assets, productivity and workforce changes (Chart 67).

Perforex noted that part of the Coast industry’s high per unit costs are caused by low capacity utilization rates at mills. Machinery and equipment is under-utilized. So, too, in many instances, is the Coast manufacturing workforce. In addition, labour agreements give preference to seniority rather than performance. Excess labour capacity exists in many areas. Many Coast Master Agreement (CMA) provisions add to the benefits burden.

Chart 67



Low levels of CAPEX mean that workers are using aged and inefficient equipment in many mills. The combined level of productivity obtained from capital and labour is low by many standards.

To obtain productivity gains, the Perforex report identified the incremental costs involved—notably severance costs as the aged or unproductive workforce is replaced by performance-based and younger workers.

In total, Perforex identified cost reductions ranging from C\$17/m3 to \$26/m3. However, these were estimated in 2002, when exchange rates and other conditions were different from today.

Logging Costs

The Coast harvest continues to remain well below its allowable cut because it is uneconomic to harvest. Inconsistency in logging activity increases unit costs (and reduces contractor rates) because of “stop-go” or “lurch” logging”.³⁴

Forest Revitalization Act (March 2003)

Based on its strategic analyses, evaluations and consultations with stakeholders, the government introduced Bill 28 which proposed, and later enacted, significant changes in the operating environment for the BC forest industry. The subsequent Act:

³⁴ In 2005, the Trucks Loggers Association (TLA) analysed the added costs of inefficiencies in logging, from items ranging from lurch logging to underutilized equipment. Provisional estimates by the TLA indicate that these practices add the equivalent of C\$11/m3 to logging costs.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

- ◆ Reconfirmed public ownership of BC's Crown forests;
- ◆ Reinforced strict environmental standards, but placed these on a 'results basis' vs. the former costly 'prescriptive' basis;
- ◆ Established a single process for many aspects of forest administration and management, replacing former time-consuming and expensive multiple steps (e.g. forest stewardship single plan vs. multiple operating plans);
- ◆ Announced the takeback (with compensation) of 20% of Crown replaceable tenures from licensees (the first 200,000 m3 of each licence was exempt to protect smaller operators);
- ◆ Reallocated the 20% takeback volume to (a) an auction-based system [via BCTS] and (b) First Nations, woodlots operators and communities;
- ◆ Set aside volumes for value-added wood product manufacturers, allocated on a bid-basis;
- ◆ Facilitated increased participation of First Nations in the sector.

The Act also:

- ◆ Abolished appurtenancy rules (thus removing mandatory links between logging and processing in specific facilities and/or locations, and allowing greater flexibility of log flows on a market-driven basis);
- ◆ Retained Crown log export existing restrictions;
- ◆ Removed tenure transfer penalties (thus facilitating access to Crown timber for new entrants);
- ◆ Adjusted minimum cut controls (thus improving harvesting in response to market conditions), but the Act reconfirmed maximum cut controls;
- ◆ Removed restrictions on sub-dividing of tenure by licensees (thus facilitating rationalization and consolidation);
- ◆ Took steps to improve the efficiency of log markets (including the creation of BCTS);
- ◆ Initiated steps to simplify Bill 13 ("one of the most complex dispute resolution mechanisms in the province" according to the Ministry of Forests). This retained existing legislation to protect the interests of independent loggers. It reinforced (but tried to simplify) measures to secure, for independent contractors, fair and equitable market-based rate setting;
- ◆ Created FII (replacing FRBC) to facilitate marketing initiatives, open up new markets and stimulate new product development and R&D by the sector.

Among the many results of the Act, the industry has been able to rationalize and consolidate, respond better to market forces and deal more effectively with government agencies. The conditions for attracting investments by new entrants into the industry have improved. Market-based pricing mechanisms have been reinforced throughout all aspects of the forest economy.

First Nations, as noted earlier, are now participating more extensively in the industry.³⁵ Since 2002, the Minister of Forests and Range has signed agreements with 99 First Nations to provide access to 15.7 million m3 of timber (about 20% of the province's harvest).

³⁵ See 'First Nations Participation' in Section 4



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

Committee's Perspective

The Committee acknowledges the vital role that Bill 28—ultimately the Forest Revitalization Act—has played in bringing fundamental improvements to the wood products manufacturing industry. The Committee endorses additional supplementary initiatives made that have stemmed from the Revitalization Plan, and others currently being considered. For the Coast region, these are vital, but not in all cases sufficient, measures—particularly in the context of recent further sharp deterioration in the industry's operating climate.

Industry Actions following the Revitalization Act—Coast Vision

By the fall of 2003, despite improved levels of governance, BC's coastal forest industry was in a severe crisis. The Act had facilitated a series of much needed actions. Some were beneficial. Others (e.g. 20% take-back) were not universally popular among industry firms. With more mills and timberlands idle than working, the industry continued to reel from a 15-year downward spiral of job and financial losses. Recognizing that the *status quo* was not an option, three competitors (Interfor, TimberWest and Weyerhaeuser) came together to develop a shared vision of what a rejuvenated Coast industry could look like in ten years.

In '*Embracing a New Vision: Rebuilding BC's Coastal Forest Industry*', they called on all industry players to address collectively the problems devastating the industry. The vision of the three firms and their plan outline called for collective action in the areas of operating cost reductions, upgrading of old mills, new market initiatives and attracting fresh investments into state-of-the-art world class mills.

The Munroe Report

Agreement over labour issues and costs between the industry and organized labour was not reached in the subsequent round of collective bargaining. Don Munroe's report was commissioned under the *Coastal Forest Industry Dispute Settlement Act*. In May 2004, he made recommendations that were the basis for an arbitrated settlement between coastal employers (Forest Industrial Relations [FIR]) and IWA Canada. A four-year deal was negotiated, which expires in June 2007. The industry's negotiating position was that labour costs had to be reduced by about 30%.

Coast Recovery Group (Current)

Initiated by the Coast Forest Products Association and member companies in late 2005, the CRG has prepared a series of *Option Papers* to help alleviate some of extreme distress that threatens further closures of Coast industry firms. The CRG currently is in the process of making recommendations to the Ministry of Forests. Specific recommendations have been made to date in the following areas:

- ✓ *MPS Changes (Source of Log Grade Percentages);*
- ✓ *Pulp Log Pricing;*
- ✓ *Weigh Scaling;*
- ✓ *Second Growth Adjustment Extension;*
- ✓ *Appraisal Log Dumps;*
- ✓ *Cutting Authority Composition;*
- ✓ *No Bid Sales and BCTS Review.*

The Committee endorses the efforts of the CRG and supports implementation of the group's recommendations.

Is the P3 Worth Fixing?

At his stage, it is pertinent to ask the question "*Is the coastal P3 worth fixing?*". Can it be fixed? From industry management's perspective, the unequivocal answer is a qualified "yes". Despite all the problems summarized above, much progress has been made in the coastal industry.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

Over the past decade or more, companies, environmental lobby groups, communities, First Nations and government have been involved in changes that now position BC in the forefront of sustainable forest management. Industry firms have become world leaders in certified forest management. Consultative processes are in place to ensure that a transparent, open and multi-stakeholder participative approach to forest planning, management and stewardship is assured.

The industry is a world leader in wood products manufacturing technologies. Substantial and irreplaceable human resource skills have been built up through many years of experience in harvesting, sorting, log merchandising, primary and secondary breakdown, grading and shipping. BC firms are extensive users of advanced processing technologies. These activities support knowledge-based and technology intensive firms throughout the province. Extensive infrastructure is in place. Wood product producers have developed extensive distribution and customer networks. BC firms are well established and recognized globally as suppliers.

World markets and competitive factors pose considerable challenges for the industry. The development of new products and new markets will not be easy. Cost structures must be reduced dramatically if the 'new' BC Coast forest industry is to become viable. Old attitudes, old math and old ways of doing things will have to be abandoned.

Unfortunately, capital markets look with disfavour upon the coastal wood product industry. A high risk premium is in place. Global capital is mobile and able to find alternative, frequently less risky and invariably much more attractive applications. It will be difficult for coastal firms to attract quality lenders in this environment.

But the BC Coast industry still has much going for it (Chart 68). With the right business models, and revisions to the P3 system of Crown timber governance, a new coastal industry can be created.

On the BC Coast, 76 major sawmills were still in operation in 2004. Numerous smaller sawmills, along with plywood mills and veneer mills, engineered wood and secondary processing plants are still working. Extensive logging operations keep many thousands of people employed, and create economic growth for rural and urban communities. Over 30,000 persons are employed directly on the BC Coast.

Is the coastal P3 worth fixing? Many people in the sector and among the public believe that it is.

Chart 68

Is the P3 Worth Fixing?

From industry management's perspective,
the unequivocal answer is a qualified "yes".

Substantial obstacles and new competition exist.... but,

- Worldwide, wood products manufacturing is a growth industry.
- BC is a major player (but going through a difficult transition).
- BC has many 1st quartile mills (BC Interior) with well established networks.
- Wood is winning market share against non-wood.
- Innovative, new products are being developed constantly.
- Massive and positive global supply chain changes are taking place.
- BC is a key supply partner in these new global relationships.
- The BC industry is high tech and has extensive manufacturing expertise.
- Substantial job growth, and increased sales....if BC can get the transition right.

However, the qualifiers are these:

1. The BC Coast wood products industry is nearly defunct.
2. The industry has to be managed on business principles, and must be market-based.
3. The huge investment required in forest renewal is beyond the scope of public sector capital alone.
4. "Management by government" can't fix the industry's problems.



Observing Lessons from Other Regions

Forest sector P3s are by no mean unique to British Columbia. Other regions with public timber have a variety of models of governance in place. Two regions stand out as having relevance to the BC Coast situation—the U.S. Pacific Northwest and New Zealand.

Pacific Northwest Model

Today, sawmilling and wood products industries in the Pacific Northwest (PNW) are expanding and emerging as competitive suppliers to North American market. New (second and third growth) timber supply is emerging. Valuable hardwoods are being grown on a plantation basis.

The renaissance of the PNW lumber industry follows a twenty-year long period of gradual recovery, following the collapse of the federal timber-private industry P3 in the mid to late-1980s.

This occurred as a result of a number of factors. The region was gradually becoming uncompetitive through high costs. However, closure to harvesting of timber on federal lands precipitated the extensive closures of sawmills notably in Oregon, Washington and Idaho.

Over the period 1989 to 2002, 378 mills of all types were permanently closed (Chart 69) in these three states.

New Zealand

In the early-1980s, New Zealand faced an unprecedented economic crisis. Privatization of the country's Crown-owned (plantation) timber was raised as a policy option during the 1980s. For a number of reasons, including the view that a government-industry P3 would not work for successful industrial development in the sector, NZ plantation forests were initially corporatized (NZ Forest Corporation) and later privatized.

Chart 69

U.S. Pacific Northwest (PNW) Mill Closures

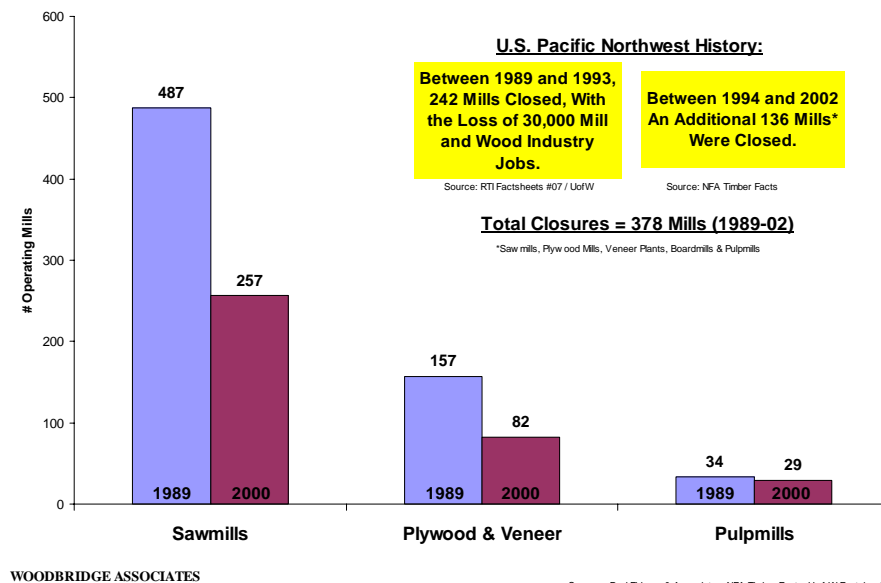
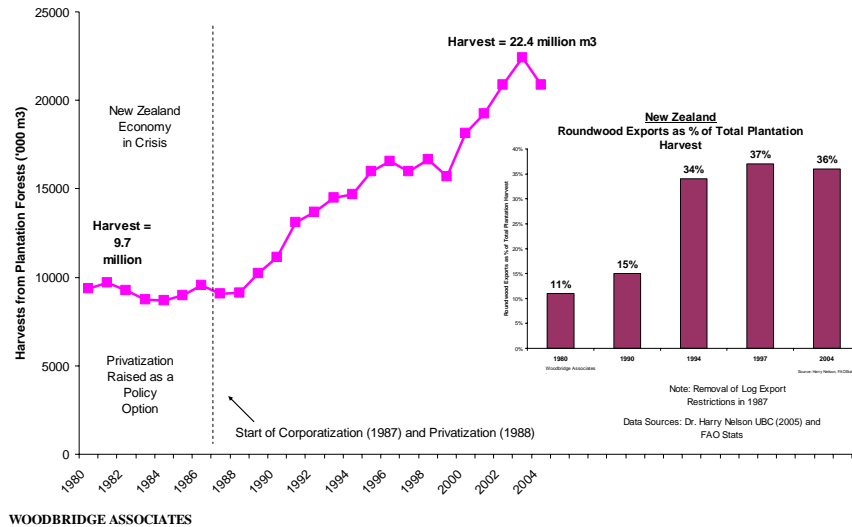




Chart 70

New Zealand
Timber Harvested from Plantation Forests
1980-2004



New Zealand's plantation timber harvest (regardless of privatization) was projected to grow rapidly (Chart 70). This provided an opportunity to attract private sector capital and to expand domestic processing of wood products, and secondary processing.

After log export restrictions were lifted in 1987, they rose rapidly as a proportion of plantation timber harvested—to around 36% in 2004 (Inset to Chart 70).

Most of New Zealand's forest product exports today are either logs (including 'clear wood' pruned logs) or sawnwood. Chile has taken a different approach to rising plantation wood harvests, and exports more processed wood.

BC Coast: Old Peer Group v. New Peer Group

The competitiveness ranking of the BC Coast lumber industry is likely to be different for its future product-market mix compared with its traditional mix. Later in this section, the Committee outlines a growth scenario for the BC Coast lumber industry based on a switch of products-markets. Specifically, the potential new product-mix would comprise:

- Increased volumes of second growth (2G) timber;
- Production of kiln-dried dimension lumber;
- US market focus;
- Competing against kiln dried hem-fir (US west coast) and SPF.

This potential shift in the BC Coast's product-market mix is further detailed in Table 4.



Table 4

	Traditional Product-Market Mix	Possible Future Product-Market Mix
Timber Type/Species	Primarily Old Growth, Limited Second Growth D. Fir / Hemlock-Balsam	Mix of Second Growth and Old Growth D. Fir / Hemlock-Balsam
Product(s)	Green / Air Dried “Traditional Offshore-Domestic” Mix < 20% KD	Kiln Dried Dimension “New” Domestic-Offshore Mix >90% KD
Markets	Japan, Other Offshore, Some U.S.	Mostly U.S. Some Japan, Other
Price Point	Green D. Fir Green Hemlock	KD Hemlock KD SPF

The price point for the new product mix manufactured on the BC Coast most likely would be pitched at a mid-point between BC Interior SPF and western US hem-fir. Data shown earlier indicates what the Coast industry’s production cost position would have to become, based on the 2004 global cost comparison survey data provided.

BC Coast: Revised Cost Competitiveness Ranking

The *BC Coast Industry Turnaround Plan* proposed later in this report by the Committee envisages a revitalized Coast lumber industry along with expanded manufacturing of veneers, plywood, LVL and several other engineered wood products. A much more robust secondary wood product industry is envisaged. In primary lumber production, the Plan envisages two broad types of enterprises:

1. **New Mills:** Based on a high proportion of second growth timber, in addition to old growth, producing dimension lumber, structural engineered wood products and value-added composite products – mainly for the US market.
 - large scale, high productivity operations
 - short haul for in-bound logs
 - mills located close to tidewater
 - waterborne shipping to markets in California/elsewhere

2. **Existing Mills:** Based on a mix of old growth timber (OG) cut for value, and second growth timber (2G) cut mostly for commodity products.
 - re-equipped and upgraded existing mills and plants
 - focus on getting value from the log (tight grain, old growth)
 - heavy to specialties product-mix
 - potentially linked with ‘new investment’ for innovative approaches to sales and distribution through channel partners

Following its recent acquisition of Cascadia, Western Forest Products is a good example of the emergence of the latter model on the BC Coast. It combines mostly old growth with some 2nd growth timber harvesting — and produces a range of lumber products from commodity to higher valued specialties.



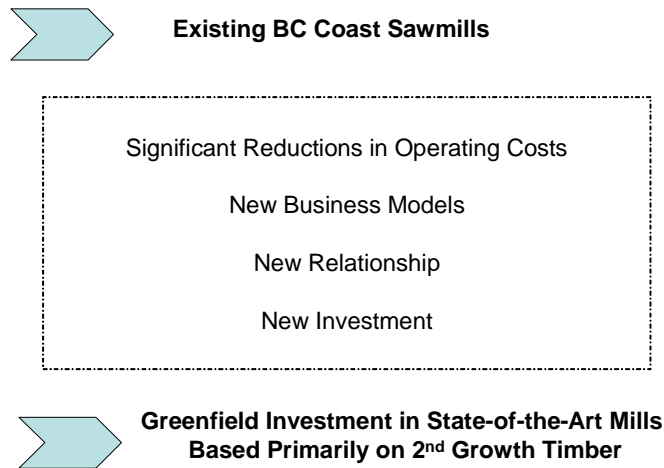
New capital will have to be attracted in order for the proposed 2nd growth timber manufacturing model to work. Estimates suggest that over \$1 billion³⁶ in new sawmilling CAPEX will be required.

BC Coast Industry Revitalization Plan

The dual focus (Chart 71) of the proposed coastal plan is to provide radical changes in the operating conditions for the existing industry and to attract new investment capital into state-of-the-art sawmills based on second growth timber, and the product-market outlined above.

Chart 71

Dual Focus of Coast Industry Turnaround Plan



The economics of the business model based on exclusive harvesting of 2nd Growth timber are illustrated in Chart 72. For example, by shifting to a mix of 75% second growth/25% old growth timber, substantial financial and other benefits can be obtained.

Pace of Transition to Second Growth Crown Timber

Recent re-structuring of the BC Coast industry has involved substantial commitments of capital by new players, such as Brookfield Properties (formerly Brascan), well in excess of \$1 billion—in a single transaction. Western Forest Products (part of this group) subsequently has acquired Cascadia Forest Products (also part of the group), as part of a streamlining and optimization process on the Coast.

Western is developing a new coastal manufacturing model based primarily on Crown licences for second growth timber, with a product-market focus comprising a mix of commodity products, value-added and higher specialty wood products production. This is linked to potentially expanded growth of value-added processing by independent small and medium scale businesses on the Coast (see Section 6 for further discussion).

The Committee believes that the future of wood products manufacturing on the BC Coast is a 'mixed-model'. Significant additional new investment can be attracted into greenfield new manufacturing plants based primarily on second growth Crown timber utilization.

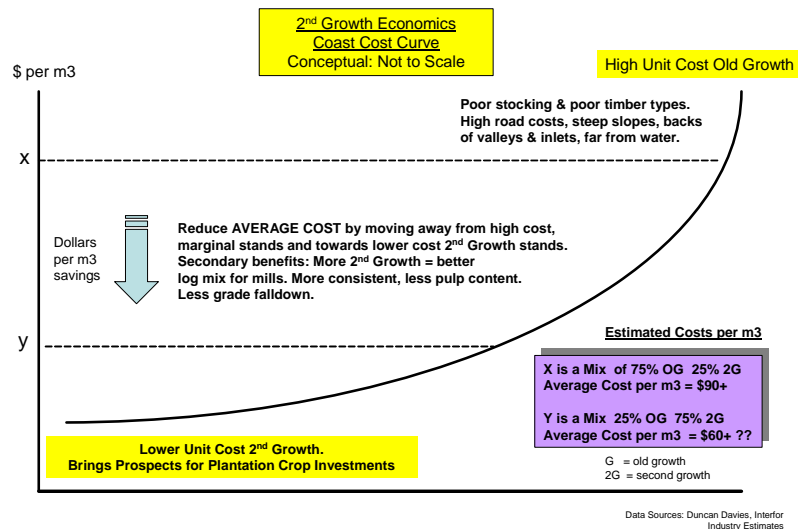
This new industry will co-exist alongside the emerging new business model based principally on old growth Crown timber harvesting, being developed by Western and others.

³⁶ CFPFA estimate



Correspondingly, the pace of transition of the future Coast industry from its traditionally heavy dependence on old growth Crown timber to increased dependence on the processing of second growth Crown and private timber is an important issue to be resolved. It will depend on an array of factors. These include issues such as second growth timber availability, harvesting regimes and economic transition. Economic fibre supply to BC's vital pulp and paper sector is a key issue to consider in this transition.

BC Coast: The Economics of 2nd Growth



Data Sources: Duncan Davies, Interior Industry Estimates

Committee's Recommendations for the BC Coast

The Committee's principal recommendation for the BC Coast industry is that:

*The Industry should take primary responsibility for managing strategic and operational transitions in manufacturing activities located within the region through a **BC Coast Turnaround Plan**. The Government of BC should work with industry to ensure that the key initiatives defined below are achieved.*

Softwood Lumber Trade Negotiations

As noted earlier, this is one of the most urgent and substantial issues affecting the competitiveness of the BC lumber industry. It is discussed extensively in this report. However, as a national process is in place dealing with it, the Committee has not made any recommendations regarding this issue other than that a "US market access" filter should be applied to all government policy changes.

BC Coast Region Specific Initiatives

BC Coast Turnaround Plan

It is the fundamental view of the Committee that the priority focus for the coastal forest sector is creation of the financial and operational conditions necessary to attract new investment required to compete in the global forest products marketplace. It is estimated by the CFPA that over \$2.5 billion in new capital is required in investment to ensure a turnaround for the coastal wood products, and pulp and paper sectors.

However, the business case necessary to support capital investment does not exist today. Simply put, our uncompetitive position precludes meaningful investment in the sector. The recommendations included in the proposed B.C. Coast Turnaround Plan represent the industry's view on the key changes required to rectify the capital challenge, improve operational conditions and create the investment climate necessary to regain a competitive position.



Without these changes the coastal forest industry will continue its long decline with the attendant revenue reductions, employment loss and community disruption.

Key elements of the proposed Turnaround Plan include:

1. Land Use Certainty and Crown Forest Management

- 1.1 *Define and establish “competitiveness” criteria and apply them to the forest management regulatory framework, government administrative activities and land use planning to provide stable access to a market driven and economic timber supply required for the coastal forest sector to compete in the global wood and paper products marketplace. The result will be a dedicated industrial forest land base with a stable set of operating rules;*
- 1.2 *Expand the Forestry Revitalization Plan to make coastal B.C. a competitive forestry jurisdiction through further implementation of market driven policies, standards based approaches and regulatory simplification that streamlines government intervention and places a priority on enabling a vigorous, efficient and world competitive forest products processing industry in British Columbia;*
- 1.3 *Immediately implement a First Nations consultation and accommodation framework for forest based activities, based on current jurisprudence, which recognizes the Crown’s sovereignty, respects, recognizes and accommodates First Nations interests and provides the forest sector with timely and stable access to the AAC; and*
- 1.4 *Redefine the private-public-partnership between the coastal forest industry and the Ministry of Forests to create a positive and business oriented approach to the relationship.*

2. Reduce Coast Lumber Production Costs

The competitiveness gap in coastal lumber production is identified at US\$54/m³ (net lumber basis, 2004 data). Positive financial and operating conditions are a prerequisite to enabling industry to raise capital to invest in productivity and innovation. Actions required to eliminate the competitiveness gap include reduction of delivered wood costs; reduction of mill conversion costs; and introduction of tax incentives to attract capital investment.

2.1 Reduce Delivered Wood Costs *Actions to reduce delivered wood costs and improve the return to log across differing levels of harvest required to meet the industry’s weighted average cost of capital are:*

- 2.1.1 *Update the Market Pricing System (MPS) to ensure that market forces determine stumpage and drive the timber pricing system;*
- 2.1.2 *Conduct a review of the legislation, regulation and policy with a mandate to streamline procedures and remove regulation and policy that creates unnecessary operational costs or decreases competitiveness; and*
- 2.1.3 *Continue and build on operational optimization, consolidation and cost reduction activities in woodlands operations.*

2.2 Significantly Improve Coast Mill Conversion Costs *Current mill conversion costs must be significantly improved in order to compete with first quartile mills in the Pacific Northwest - our direct competitor. Cost savings can be achieved through investments in productivity and innovation including the following:*

- 2.2.1 *Encourage capital spending in new manufacturing equipment and technology for existing and new mills to increase productivity and lower unit costs;*
- 2.2.2 *Implement measures and increase investments to improve workforce productivity and flexibility; and*
- 2.2.3 *Establish a Coast Forest Industry Sector Council to oversee and enable fundamental progress on labour cost competitiveness. This broad based sectoral approach to labour*



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

cost reduction can facilitate commitment of all stakeholders to making the transition to globally competitive labour costs.

2.3 Taxation *Government can play a vital role in enhancing the forest industry's ability to attract investment through investment tax incentives and providing a competitive tax environment. A full review of the competitiveness of provincial and federal taxation policy should be undertaken including review of federal corporate income tax rates; capital cost allowance schedules; refundable investment tax credits or flow-through share tax credits; municipal taxes; provincial logging tax and provincial sales tax on business inputs (readers should refer to the BC Business Council report to BC Competition Council for further details on tax reform).*

3 Transition to Second Growth

Review the forest policy framework to ensure it encourages and supports a market driven transition to second growth harvesting. Market and product demand, delivered log cost pressures and changing age classes in the timber inventory are driving the transition from old growth harvest to second growth harvest and current policies must support with this transition.

4 Tenure Arrangements

4.1 *Establish innovative new tenure arrangements that will encourage private investment in and entrepreneurial management of public lands. Pilot new competitively bid renewable long-term leases based on second and third growth harvesting from Crown controlled timber. Ensure that these new tenures are unencumbered from polices/regulations/legislation/agreements that do not exist in competing jurisdictions; and*

4.2 *To create certainty, required to raise capital and provide the Provincial government with flexibility to address changing land base priorities, "private property" type rights should be clarified and strengthened in existing timber harvesting tenure contracts. This will clearly delineate "up front" compensation in circumstances where the Crown takings erode licensee's contractual rights.*

5 Notice 102

Exports of private land logs are part of the economic solution for the B.C. coast wood products industry, and are a factor in the ongoing softwood lumber trade dispute.

All federal and provincial barriers to the export of logs from private lands should be removed immediately.

In recognition of this initiative, and to ensure a level playing field and consistency across Canada, the Federal and Provincial governments, must at a minimum insist that all lumber produced from private land logs be exempted from any form of border measure including the current countervailing duties (similar to the exemptions provided the Maritimes and Quebec border mills) as part of the Coast's progression to a full market based forest policy framework.

6 Community and Workforce Transition

Both levels of government should provide funding to communities and industry for community and workforce transition required to address the required coastal restructuring and rationalization that will result in closure of excess capacity in both the manufacturing and harvesting sectors.

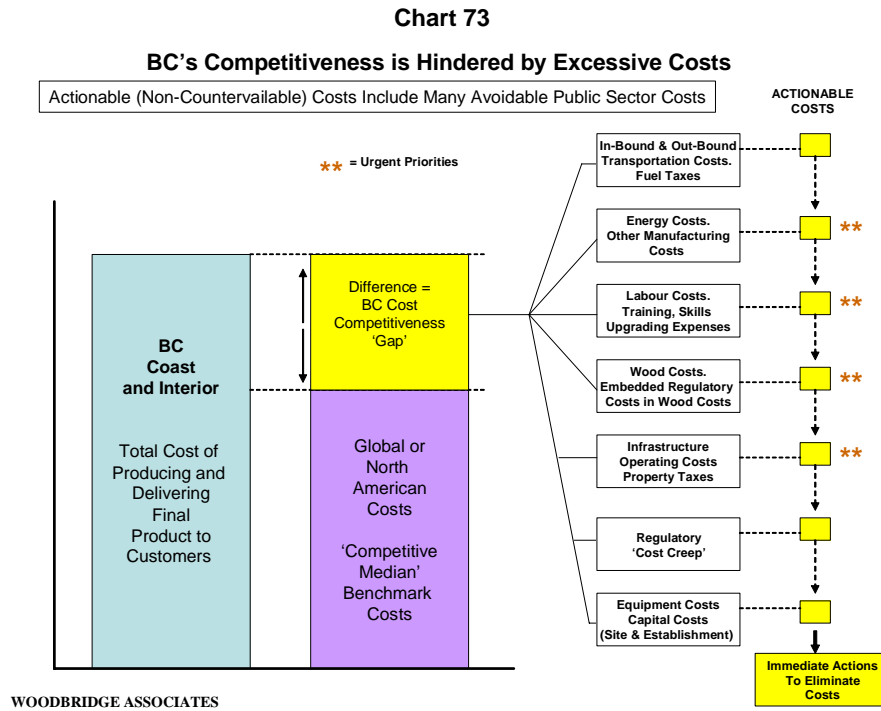
7 Implementation of the Coastal Turnaround Plan

Industry and government must jointly appoint and empower (mandate) a "Coast Industry Advocate" to finalize the Turnaround Plan and implement the elements of the plan by 2008.



Areas for Cost Reductions

Chart 73 illustrates schematically areas where operating cost reductions are likely to be found. The more highly ranked items are highlighted. It is important to note that there are significant negative gaps between many areas of BC's costs compared with other jurisdictions – for the Coast and Interior. Systematic line-item by line-item diligence will be required, by all stakeholders in the sector, if these excess costs are to be eliminated from the province's overall cost structure.



Impacts of the Detailed Recommendations

The Committee's recommendations would have a range of varied but positive impacts, including reductions in the cost of doing business and enhancing the conditions for attracting new capital on a sustained basis.



Section 7

Province-Wide Initiatives



7. Province-Wide Initiatives

In this report, the Committee has identified urgent and strategic issues facing BC's two principal operating regions—the BC Interior and BC Coast—and has recommended initiatives that address the specific needs of these regions. In addition, there are many common issues that merit province-wide solutions. These are discussed in this section. They include the following:

- Woodlands and Mill Safety;
- BC Timber Sales;
- Ministry Goals & Priorities;
- Government Cost Creep 'Pass Through';
- Revenue Sharing & Resource Dividend;
- Municipal Taxation;
- Bio-Energy;
- Labour Force & Skills Training;
- Value-Added Manufacturing Development;
- Vital Importance of BC's Pulp and Paper Sector.

Woodlands and Mill Safety

Woodlands and mill safety is of paramount concern to the Industry. Several recent initiatives have been undertaken to address urgent issues relating to safety and to establish new higher standards of individual, company and contractor performance.

BC Timber Sales

The urgent need for a market responsive timber pricing system throughout BC has been identified several times in this report. With regard to the future role of BC Timber Sales, the Committee has concluded that the mandate, goals, priorities and effectiveness of the organization must be clarified and, where necessary, refocused.

Of particular concern are the issues of (a) Crown timber allocation and (b) the need to create an effective database for market pricing of Crown timber sales. The latter must take into account all market price signals, including instances of no-bids.

Ministry Goals and Priorities

The Committee's report notes that BC has a unique system of Crown timberland governance. Analyses have been presented to show that the hundred-year P3 relationship with industry is no longer working as well as it did. For the BC Coast region, it requires a substantial make-over. With the Mountain Pine Beetle epidemic in the BC Interior, the strength of the P3 will be tested in the years to come.

The future success of the P3 also depends on the attitudes of the partners. In the report, the Committee has reviewed three possible development scenarios and has re-stated its commitment to making the P3 work effectively, and to undertake various initiatives to ensure this success. However, the Committee is concerned that this level of commitment is not widely shared throughout all levels of provincial government ministries.

Section 4 noted that there are many drivers of regional competitiveness. In regions such as BC,

where P3 relationships are an integral part of the sector's structure, the attitudes of government ministries, ministry executive and staff can have a substantial impact on BC's ability to compete in tough world markets.

On behalf of the industry, the Committee has re-stated its commitment to making BC's unique P3 work effectively, and to undertake various initiatives to ensure this success. However, the Committee is concerned that this level of commitment is not widely shared throughout all levels of provincial government ministries.

More specifically, as BC forest product manufacturing firms work towards positioning themselves as competitive top quartile producers, the operating interface between industry and government determines a



BC COMPETITION COUNCIL **Wood Products Industry Advisory Committee**

lot of the potential for success. The BC wood product industry increasingly seeks to focus its workforce on a “winning culture” of achieving and maintaining 1st quartile status and/or superior levels of competitiveness.

Global Culture of Competitiveness

In Beijing, Shanghai, Santiago, Vilnius, Prague, Taipei, Hai Phong, Khabarovsk, Berlin, Tokyo, Jakarta, Delhi, Canberra, Moscow, Auckland, Helsinki, Washington DC and many other places, government officials are involved daily in helping position their respective forest industries competitively. Worldwide, collaborative efforts within countries to help their industries jostle for ‘top quartile’ positioning are unrelenting.

To many British Columbians, the phenomena of ‘globalization’ and ‘competitiveness’ convey only a weak understanding of the extent of the actual global forces at work among BC’s competitors today. BC’s culture of government intervention in its forest products sector frequently contrasts sharply with most of the rest of the world. Ironically, the vital role of a healthy and profitable private sector within P3 relationships seems to be well understood in many regions that formerly were dominated by centralized planning and public ownership!

For example, to help encourage fresh investment in state-of-the-art manufacturing technologies, privatization of forestlands is taking place in former communist-dominated countries—notably the Baltic states and many parts of eastern Europe.

In China, state-owned enterprises (while still retaining close overall control over the operation of manufacturing plants) are being sold to private sector interests. As a result, the flow of new capital investment into state-of-the-art plants is rising rapidly.

How many officials within all four levels of government in BC, ever think in terms of positioning BC’s forest products manufacturing sector as a sustainable 1st quartile global competitor?

Most don’t think it’s their job to do so –even though the sector’s competitiveness is vital to their future, and to the future of the province.

BC’s Forest industry: The Government’s Mandate

The Ministry of Forests Act obliges the Ministry to “encourage a vigorous, efficient and world competitive timber processing industry in British Columbia.”

Old Ways and New Ways of Thinking

Over time, owners and managers of BC’s private sector forest products manufacturing facilities have become so used to government intervention, and sometimes dependent on it, that the overall business culture in the sector is resistant to change. With notable exceptions, proportionally fewer managers, workers and government employees involved in BC’s forest sector appear to have the same “winning attitude” that increasingly is apparent in many of competing jurisdictions to BC listed above.

Without a significant attitudinal change, starting at the most senior levels of government and permeating without dilution throughout all ministries, much of BC’s potential to secure a long term sustainable globally competitive position in the forest products manufacturing, and allied services, business will not be achieved.

Government Cost Creep ‘Pass Through’

A related aspect of P3 model competitiveness is that this mechanism allows hidden costs to be added, and passed along to the industry, as part of the timber pricing, Crown timber administration and regulatory framework. A *business filter* is needed to identify where these costs are being added, and to eliminate all unnecessary costs.

More generally, it is vital that government should apply a clear and transparent benefit-cost framework to its major policy, legislative and regulatory initiatives as they are developed. Correspondingly, industry should undertake cost benchmark studies on an on-going basis and present the results to government in a timely way. Government and industry at the executive level should meet on a semi-annual basis to assess progress on implementation of the competitive agenda. Government should implement the new “results and performance-based” regulatory structure enshrined in the Forest and Range Practices Act.

Municipal Taxation

The Committee received submissions and heard evidence that municipal taxes, specifically, are an increasing impediment to attracting new investment into large and medium scale industrial enterprises into British Columbia. The Wood Products IAC has worked closely with the Pulp and Paper IAC on this issue.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

Based on extensive research carried out by the Pulp and Paper IAC, the Wood Products Committee has reviewed the findings and fully endorses the Pulp and Paper IAC's recommendations.

Revenue Sharing and Resource Dividend

In order to provide an alternative revenue source to municipal governments, communities and First Nation peoples, the Committee proposes the creation of a resource dividend policy and mechanisms. This subject was introduced earlier, along with the recommendation that the concept should be evaluated (see BC Interior Transition Plan). Based on this evaluation, the concept could be applied as a province-wide initiative.

Municipal or Community Dividend

The objectives of the municipal or community Resource Dividend would be:

- o To improve public and community awareness of the economic contributions of the forest resource sector, and
- o To ensure that people in local communities receive additional financial benefits from economic activity in and further development of the province's resource sector.

Creation of a municipal or community Resource Dividend would involve:

- o Government setting aside a dedicated portion of direct provincial forest revenue (stumpage) to a new system of community grants (e.g. Municipal Resource Dividend).
- o A municipal Resource Dividend created from direct payments (stumpage) from the forest industry with an offsetting reduction in both provincial and municipal taxes.
- o A corresponding reduction in the industry's fixed costs (e.g. municipal tax reduction) offset by the Resource Dividend.

The proposed Community Resource dividend would not require higher total payments from industry and initially would be revenue-neutral to the Province.

First Nations Resource Dividend

The Committee supports the broad intent of the Province's 'New Relationship' to improve land base certainty and integration of First Nation's interests, and proposes that the BC government should work carefully to implement this strategy with effective input from the business community. This would include government, industry and the First Nations Leadership Council working together on the implications of the New Relationship concept.

The objectives of the First Nations Resource Dividend would be:

- o To support the province's overall strategy for First Nations participation in the forest sector;
- o To stimulate First Nations economic development activities prior to resolving land interest areas.

The proposed First Nations Resource Dividend would not require higher total payments from industry and initially would be revenue-neutral to the Province.

Bio-Energy

BC's forest sector, notably the province's pulp and paper sector, faces unprecedented off-shore competition from mills that are larger-scale and benefit from new technology that is driving low operating energy rates. Many of these mills receive financial incentives.

The Committee is strongly opposed to financial intervention by any level of government in the private sector. It is clear, nevertheless, that government policies in areas such as energy are multi-sector and can have adverse and severe impacts on individual sectors, such as forest products, where some manufacturing processes are very energy intensive—and financially prone to sharp price changes.

The Committee is strongly opposed to financial intervention by any level of government in the private sector.



The recent experience of the forest industry in eastern Canada and parts of western Canada, resulting in a substantial and permanent loss of jobs and numerous mill shutdowns and closures, illustrates this point. Policies that are developed on a province-wide basis (e.g. Ontario's industrial energy policy), especially when combined with other factors (e.g. rising Canadian dollar) can quickly make these reliant manufacturing sectors non-viable and uncompetitive.

It is especially important for government to ensure that it is very competitive in the supply and pricing (and taxation) of public sector goods, or to ensure that alternative mechanisms to provide these goods, are considered well in advance.

Labour Force and Skills Training

One of the most significant challenges to the long term competitiveness of BC's forest industry is the shortage of persons with the skill sets and experience required to meet the needs of this increasingly technology-intensive and knowledge-based sector.

One example of a key HR issue is that some potential stakeholders in the industrial renewal process on the BC Coast (e.g. younger, better qualified people) do not have the opportunity to obtain jobs and participate through merit in the wealth creation process. Specifically, this refers to the Coast labour, union seniority issue. There are many other examples.

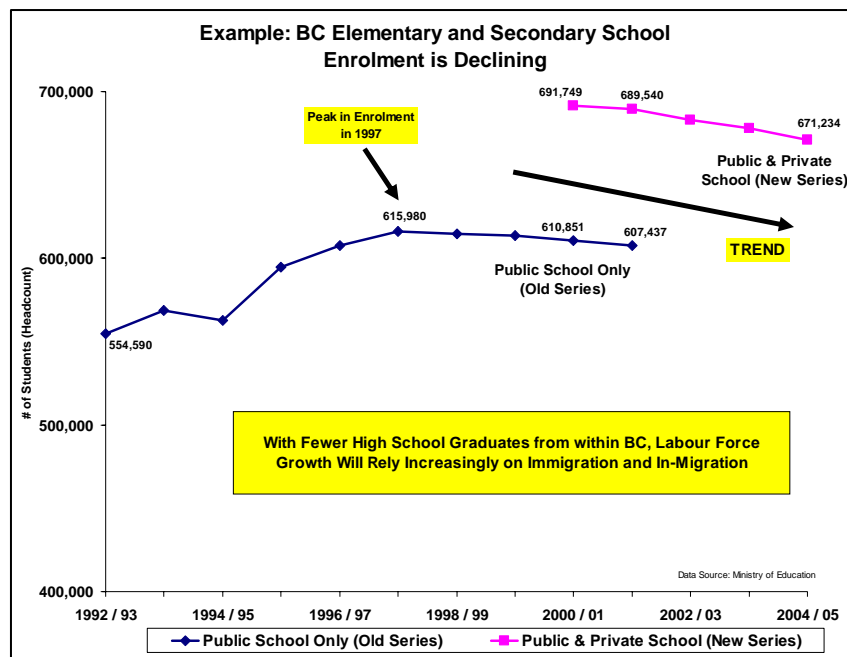
Overall, from a global competitiveness perspective, "mobile" tools for wealth creation (e.g. capital, leading-edge management, the 'best and brightest employees' and support services) will seek out jurisdictions where the compensation and rewards are greatest. Clearly it is important for the BC wood product industry to be at least 'on par' with its competitors in this process.

Attraction, Recruitment, Retention

The Coast industry has a tough time attracting and recruiting entry-level workers, and it recruits comparatively few male or female post-secondary (P2E) graduates. Trades training, notably in skilled-shortage occupations such as saw trades, has fallen well below levels needed to sustain the industry over the long term. However, the industry is active in funding P2E skills upgrading for the existing workforce.

In contrast, older workers have high levels of seniority—making it difficult, under current labour market conditions, for younger workers and high productivity workers to gain promotion based on merit. The demographics in BC underlying growth in the sector's workforce are unfavourable.

Chart 74

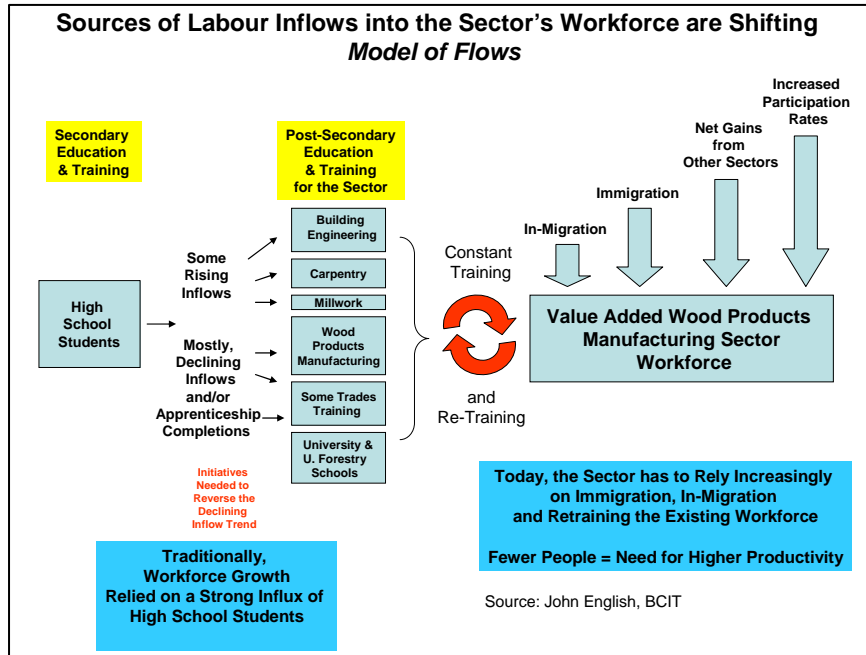


Source: BCIT School of Construction and the Environment, Strategic Plan 2004



Strategic studies by BCIT.³⁷ show that recruits to the Coast industry workforce emerging from BC's secondary schools are declining (Chart 74). This is forcing employers throughout the industry to rely increasingly on immigration, in-migration and retraining the existing workforce (Chart 75).

Chart 75



Value-Added Manufacturing Development

Secondary processing of wood products is not as well developed in BC as in most other provinces. There are various reasons for this situation, and several reports have been written on the topic.

Importantly, the Committee believes that increased levels of secondary processing within BC are possible and desirable as the industry moves forward. These would help the BC wood products manufacturing industry to:

- Develop new markets;
- Diversify its product market mix;
- Reduce the province's trade-dependence on softwood dimension lumber;
- Capture emerging supply-chain opportunities, notably in structural engineered wood products and many appearance grade products;
- Provide increased opportunities for independent small business and First Nation peoples to participate in secondary processing enterprises, potentially in partnership with primary producers.

Past policies that directly linked the desire for expansion of the secondary processing sub-sector to the allocation of standing timber resources have not achieved the results that were anticipated. Significant new investment has not flowed into primary-dependent secondary processing activities in BC.

The Committee believes that secondary processing manufacturing development must be re-focused from resource-driven to "market pull". In BC today, there are numerous examples of successful collaborative efforts between independent secondary processors and primary wood product manufacturers. The development of extensive new capacity in finger-joint structural lumber is a notable example. But there could be much greater opportunities in this regard.

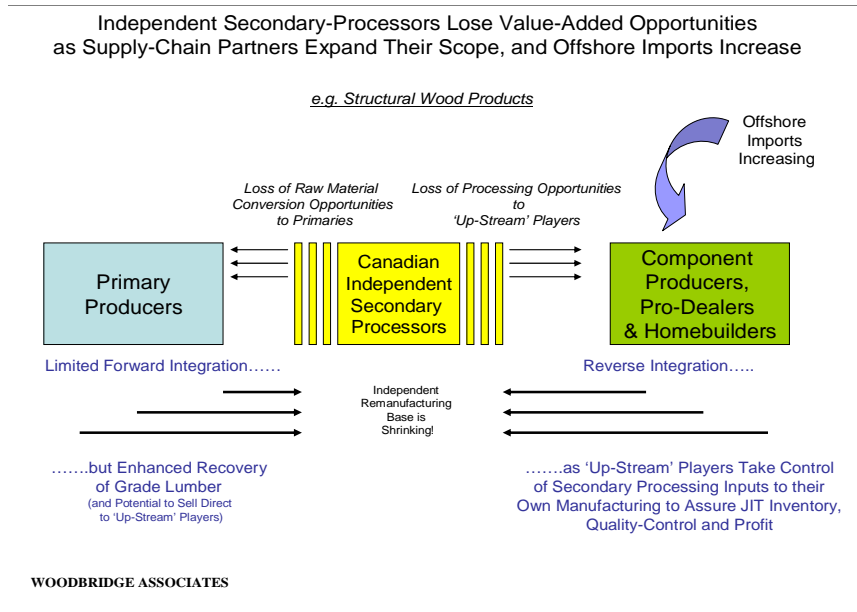
³⁷ John English. Dean, BCIT School of Construction and the Environment.



Value Recovery at Primary Mills

Historically, a large part of the feedstock utilized by BC lumber re-manufacturers has been low grade primary wood products (e.g. utility, economy and ‘reman’ grade lumber). As primary mills have improved their efficiencies and have recovered more value from the log, the average quality of lower grade lumber available to independent ‘remanners’ has declined (Chart 76).

Chart 76



The same effect has resulted from secondary processing increasingly carried on “up-stream” by specialty component producers, pro-dealers and homebuilders. These are large scale operations producing comparatively standardized products—that in many cases could be produced competitively as ‘job-packs’ by smaller scale businesses in BC. Major BC primary firms could assist in sales and distribution—and it is in their business interests to do so. This collaborative model is working well in several jurisdictions.

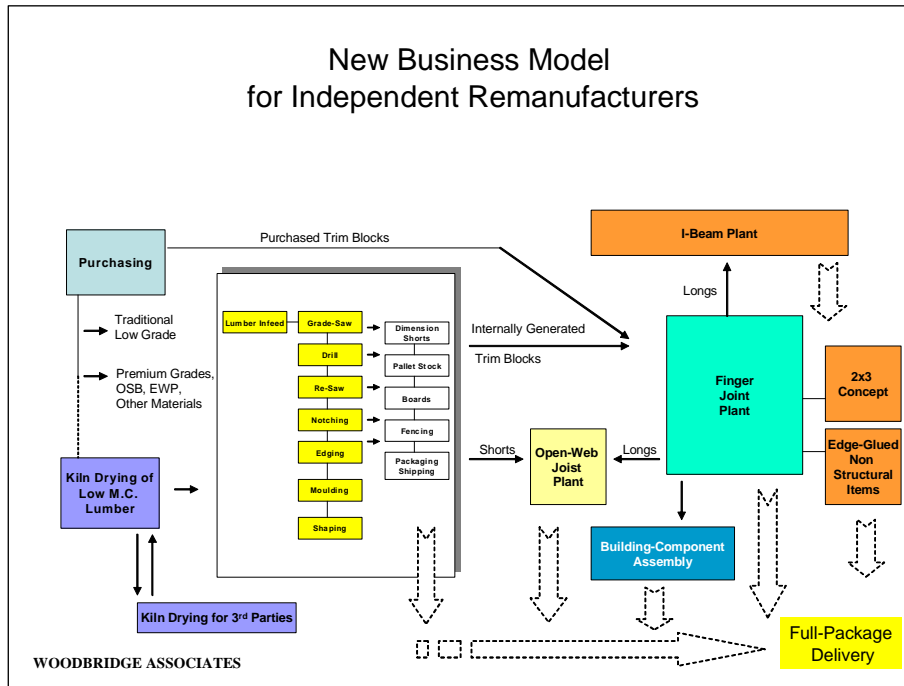
Clustering

Supply-chain developments in North American and offshore markets suggest that the Canadian industry should be much more aggressive in developing new markets and new products to meet emerging needs. For example, consolidation among US homebuilders, and the development of national account servicing relationships indicate an increasing trend towards one-stop shopping. In turn, major primary producers, who have strong customer relationships and well developed distribution networks, foresee an expanding role for mill-level consolidators of a variety of wood products and services.

The primary-dependent secondary wood processing sector in BC is highly fragmented. Some recent consolidation has been taking place, but this is not yet widespread. Access to capital often is a challenge for smaller firms. Successful business models are being developed, however, that can provide a diversified product mix (Chart 77) and open up opportunities for synergistic relationships between manufacturers. Culturally, this has not been part of the industry’s past behaviour.



Chart 77



Committee’s Recommendations for Province-Wide Initiatives

1. Woodlands and Mill Safety: *Woodlands and mill safety is of paramount concern to the Industry. Several recent initiatives have been undertaken to address urgent issues relating to safety and to establish new higher standards of individual, company and contractor performance. The Committee considers these issues to be among the highest priorities addressed in this report and recommends that the goal of zero fatalities be adopted as a key component of the industry’s standard practices.*

2. BC Timber Sales: *Carry out a third party independent review of BCTS, in collaboration with recently appointed new CEO, to clarify the mandate, goals, priorities and effectiveness of the organization from the viewpoints of (a) Crown timber allocation, and (b) creating an effective database for market pricing of Crown timber sales. The latter must take into account all market price signals, including instances of no-bids. The review should consider if a market responsive timber pricing system can be achieved through the BCTS, or a similar organization with a corporatized structure (e.g Crown corporation), or should recommend if some form of privatization should be considered.*

3. Ministry Goals & Priorities: Government Cost Creep ‘Pass Through’: Need for a Business Filter: *Ministry of Forests and Range staff attitude, accountability and the ministry culture prevailing in many instances are not in accordance with the Ministry of Forests Act which obliges the Ministry to “encourage a vigorous, efficient and world competitive timber processing industry in British Columbia.”*

Government must apply a clear and transparent benefit-cost framework to our major policy, legislative and regulatory initiatives as they are developed. Industry should undertake cost benchmark studies on an on-going basis and present the results to government in a timely way. Government and industry at the executive level should meet on a semi-annual basis to assess progress on implementation of the competitive agenda. Government, as a top priority, should act on the new “results and performance-based” regulatory structure enshrined in the Forest and Range Practices Act. Government should identify a mechanism, and a specific point of responsibility within the provincial government, to install a business filter on government decisions impacting the sector. This should include identifying and eliminating the ‘cost creep’ that is a side-effect of many ministry decisions. More generally, the government should accelerate the pace of current actions already underway to bring about a cultural change in all government ministries’ executive and staff dealings with the industry.



BC COMPETITION COUNCIL
Wood Products Industry Advisory Committee

4. Streamline Barriers to Consolidation and Rationalization: *Remove all remaining barriers to exit, restrictions to consolidation and limitations to market-based rationalization of the BC forest products manufacturing industry, and negotiate the same with federal agencies to bring about a single-window provincially-led review and approval process.*

5. Community & First Nations Resource Dividend: *The Committee supports the broad intent of the Province's 'New Relationship' initiative and recommends that government should work carefully with the business community to implement this strategy. In the context of recent related financial commitments to First Nations, government should evaluate the concept of a resource dividend that would improve public and community awareness of the economic contributions of the forest sector, cultivate increased commitment to the industry's success and provide an alternative source of income (with offsetting reductions in property taxes) for local communities and First Nations. This revenue would be derived from direct taxes (stumpage) paid by the province's resource sector.*

6. Municipal Taxation: *The Committee received submissions and heard evidence that municipal taxes, specifically, are an increasing impediment to attracting new investment into large and medium scale industrial enterprises into British Columbia. The Wood Products IAC has worked closely with the Pulp and Paper IAC on this issue. Based on extensive research carried out by the Pulp and Paper IAC, the Wood Products Committee has reviewed the findings and fully endorses the Pulp and Paper IAC's recommendations. A letter has been sent to the BC Competition Council in support of these findings.*

7. Bio-Energy: *BC's forest sector, notably the province's pulp and paper sector, faces unprecedented off-shore competition from mills that are larger-scale and benefit from new technology that is driving low operating and energy rates. Provincial sales tax should no longer be applied to the cost of industrial electricity. BC is the only province in Canada to apply the full PST to industrial electric power purchases. Increased co-ordination and consistency of programs should be achieved between Federal and Provincial governments. The CCRA write-off rate should be increased to 100 percent to encourage all forms of biomass energy (capital equipment, installation). GST should be eliminated on energy-related investments, analyses and programs that are developed to meet the Kyoto targets. And improved accelerated capital cost allowances and incentives for projects should be undertaken to achieve greenhouse gas reduction.*

8. Labour Force & Skills Training: *The province should commit the resources and provide the political support necessary for the Industry Training Authority (ITA) to realize its vision of "British Columbians having affordable access to quality, responsive, integrated and accountable industry training that will meet the needs of industry and trainees/apprentices". The Committee endorses the Interior Forest Labour Relations Association's (IFLRA) recommendations that the ITA and industry sectors should have the capacity and resources necessary to support the smooth and timely transition to an industry-led system through the establishment of sector-based Industry Training Organizations (ITOs). The province should be prepared to stay the course. In other jurisdictions, it took time, resources, commitment and ongoing leadership to implement changes and overcome the challenges.*

9. Market Development & Diversification: *The federal government should develop a focussed communications program aimed at politicians, other opinion leaders, US suppliers and customers. The purpose would be to provide facts about the Canadian forest industry and dispel the misconceptions created by the US lobbyists. This bi-national communications strategy should also have the goal of re-establishing good will with American consumers and the market position of Canadian producers.*

10. Value-Added Manufacturing Development: *The Province should establish a 'Forest Entrepreneur Program' to provide support to the value-added sector. This Program should take the form of training in the areas of business planning, financial planning, marketing, engineering and technological support. Formal recognition could be through an annual award ("Forest Entrepreneur Excellence") jointly presented by government and industry. In addition, the Province should appoint a 'supply coordinator' to facilitate a cultural change of cooperation between primary and secondary manufacturing.*

11. BC's Vital Pulp and Paper Sector: *The Wood Products Committee supports the recommendations made in the Pulp & Paper IAC report to the BC Competition Council.*



Appendices



Glossary of Terms Used

2G	= Second Growth
AAC	= Allowable Annual Cut
ADM	= Assistant Deputy Minister
Advanced Value-Added Manufacturing	= 3rd Party production (e.g. building components, millwork, cabinets, furniture, engineered wood)
BC	= British Columbia
BCI	= BC Interior
BCIT	= British Columbia Institute of Technology
BCTS	= BC Timber Sales
CAD-CAM	= Computer Assisted Design-Computer Assisted Manufacturing
CAPEX	= Capital Expenditures
CEO	= Chief Executive Officer
CFPA	= Coast Forest Products Association
CMA	= Coast Master Agreement
CN	= Canadian National
COFI	= Council of Forest Industries
CP	= Canadian Pacific
CCRA	= Capital cost write-offs
CRG	= Coast Recovery Group
CSP	= Canadian Softwood Plywood
CVD/AD	= Countervailing Duty/Anti-Dumping Duty
CVP	= Comparative Value Pricing
DFP	= Douglas-fir Plywood
DOC	= Department of Commerce (U.S.)
EDI	= Electronic Data Interchange
FIR	= Forest Industrial Relations
FN	= First Nations
FRBC	= Forest Renewal BC
FTA	= Free Trade Agreement
GIS	= Geographic Information Systems
GST	= Goods & Services Tax
HDF	= High Density Fibreboard
HR	= Human Resources
IAC	= Industry Advisory Committee to the BC Competition Council
IFLRA	= Interior Forest and Lumber Remanufacturers' Association
ITA	= Industry Training Authority
ITO	= Industry Training Organizations
JIT	= Just-in-Time
LRF	= Lumber Recovery Factor
LSL	= Laminated Strand Lumber
LVL	= Laminated Veneer Lumber
MB	= MacMillan Bloedel Ltd.
MDF	= Medium Density Fibreboard
MPB	= Mountain Pine Beetle
MPPR	= Major Project Review Process
MPS	= Market Pricing System
MVP	= Market Value Pricing
NAFTA	= North American Free Trade Agreement
NZ	= New Zealand
OG	= Old Growth
OSB	= Oriented Strand Board
P&P	= Pulp & Paper
P2E	= Post-Secondary Education
P3	= Public-Private Partnership
PNW	= Pacific Northwest
Primary Products	= Produced by initial breakdown of the log
PST	= Provincial Sales Tax
R&D	= Research & Development
RFID	= Radio Frequency Identification
ROCE	= Return on Capital Employed
Secondary Processing	= Additional processing of primary wood products into intermediate or final products, by primary mill or 3rd party plants or factories
SPF	= Spruce-Pine-Fir lumber
SR&D	= Scientific Research & Development
TIMO	= Timberland Investment Management Organization
UBC	= University of British Columbia
UNBC	= University of Northern British Columbia
VA	= Value-added
Value-Added	= Output value less Input costs
VBT	= Vancouver Board of Trade
WTO	= World Trade Organization
YTD	= Year-to-date



List of Submissions Received by the Committee

The Committee invited submissions from all interested parties. A copy of the announcement is attached. Submissions were received from a number of organizations and individuals, listed below. In addition, industry interviews or consultations were carried out. Persons contacted are included in the list below.

Andy Smith, Interfor
Blair Mayes, Dunkley Lumber
Bill Stewart, Sinclar Group
Bob Sitter
Bob Taylor, Weyerhaeuser
Brian Fehr, BID Construction
Coast Forest Products Association
David Gray, Mill and Timber
Darshan Sihota, Island Timberlands
Don Avis
Don Roberts, CIBC World Markets
Don Wright
Gordie Andersen, Lakeland Mills
Harry Nelson, UBC
Henry Novak, Dunkley Lumber
Hugh Sutcliffe, Cascadia Forest Products
Jim Hackett
Joan McIntyre, MLA, West Vancouver-Garibaldi
John Betts, Western Silvicultural Contractors' Association
John English, Dean, BCIT School of Construction and the Environment
Ken Shields, Raymond James
Mark Bishop, RBC Capital Markets
Mike Doyle
Mike Low, Winton Global
Murray Hall
Peter Affleck, COFI
Paul McElligott, TimberWest
Paul Quinn, Salman Partners
Paul Sourisseau, Interior Forest Labour Relations Association (ILFRA)
Randy Chan, Tolko Industries
Reid Carter, Brookfield Asset Management
Reynold Hert, Western Forest Products
Robert Prinz, Weyerhaeuser
Robert Schulz
Russ Horner, Catalyst Paper
Spill Check Ltd.
Truck Loggers Association



COMPETITION COUNCIL

FOREST INDUSTRY (WOOD PRODUCTS) ADVISORY COMMITTEE

Invitation for Submissions

September 1, 2005

Dear Interested Party:

The purpose of this communication is to invite written submissions leading to actions that can improve and sustain the global competitiveness of the BC wood products manufacturing industry.

BC Competition Council

Earlier this year Premier Campbell announced the establishment of the BC Competition Council. Further details can be found at www.bccompetitioncouncil.gov.bc.ca.

Twelve industry groups (Industry Advisory Committees, or IACs) have been appointed to represent key sectors of the BC economy. Two committees will represent the forest industry –wood products and pulp & paper.

The Wood Products Committee of the Competition Council ('Wood Products IAC') comprises 9 members, each bringing a unique perspective and experience to the task at hand. I have been asked to chair the Committee.

Scope

The terms of reference provided by the Council are specific. As a result of its deliberations, the Wood Products IAC will present its key competitiveness recommendations to the Council. These will be considered and coordinated by the Council along with inputs from the other industry sectors.

We will focus our attention on actions that can and should be taken by industry, and those that would most appropriately be undertaken by government.

Terms of Reference / Timetable

We have a relatively short time to set the context for the work ahead. The Wood Products IAC will have approximately four months to identify the industry's current competitive position, the positioning that needs to be attained in the future, and the factors that will either lead to further opportunity or eliminate barriers to achieving sustainable competitive advantage.

The Wood Products IAC will then submit its conclusions and recommendations for action to the Council for its consideration.

Submissions

The Wood Products IAC welcomes input consistent with our terms of reference. Please note that submissions should be limited to issues, opportunities and constraints relating to BC wood products manufacturing industry competitiveness. This includes both the Coast and the Interior wood products industry.

Submissions received should clearly identify the organization or individual(s) making the submission, and provide a contact name and email address. Receipt of submission will be acknowledged, but the IAC will not enter into any correspondence regarding them.

Submissions should be received (e-mail preferable), by October 15 at the following address:

Wood Products IAC
c/o Council of Forest Industries
#1501 – 700 West Pender Street
Pender Place I Business Building
Vancouver, B.C. V6C 1G8