



The Pulp and Paper Task Force

**BC Pulp and Paper Industry Carbon
Emissions Performance
And
Proposed Carbon Reduction Policies**

**A Position Paper with Recommendations
For Successful Implementation of a
BC Carbon Cap and Trade System**

December 2007

The Pulp and Paper Task Force

The Pulp and Paper Task Force is an industry co-operative made up of representatives of all 20 pulp and paper mills located across BC.

As a group, we work to present an understanding of the value of our sector to the province of British Columbia. As one of BC’s largest industrial employers and single largest consumer of electricity, our sector is the backbone of many communities and contributes extensively to the provincial economy.

We also work to ensure that forest and related provincial policy is created and implemented in a way that fosters growth and increased competitiveness for our sector and for the Province as a whole. We are committed to our industry and believe that it will be a significant contributor to the provincial economy for years to come.

Members of the Pulp and Paper Task Force include:

- | | |
|---------------------------------|-------------------------|
| AbitibiBowater | Mackenzie |
| Canfor Corporation | Taylor |
| Canfor Pulp Limited Partnership | Prince George (3 mills) |
| Catalyst Paper | Crofton |
| | Elk Falls |
| | Powell River |
| | Port Alberni |
| Cariboo Pulp | Quesnel |
| Domtar | Kamloops |
| Howe Sound Pulp and Paper | Port Mellon |
| Mercer International | Castlegar |
| Neucel Specialty Cellulose | Port Alice |
| Pope and Talbot | Mackenzie |
| | Nanaimo |
| Tembec | Chetwynd |
| | Skookumchuck |
| West Fraser | Quesnel |
| | Kitimat |

1 Executive Summary

British Columbia has the opportunity to become a leader in carbon emission reductions while tapping into its fundamental strength centered around BC forests. The BC pulp and paper industry already extensively uses biomass energy to power itself and BC. That model can be embraced and expanded to help BC reach its carbon goals. But any new government policies must be appropriately developed to improve the competitiveness of existing business and the biomass market. The pulp and paper industry can help develop that policy and a vision of those solutions.

The British Columbian pulp and paper sector directly contributes over \$4 billion of annual economic benefit to the province. It is responsible for employment of almost 10,000 people with annual compensation of \$1 billion, annual goods and services purchases of \$2.5 billion and annual transfers to three levels of government of about \$600 million.

The sector has the strongest greenhouse gas reduction record in the province with total reductions reaching 64% in 2006 compared to 1990. This removal of 2.5 million tonnes of carbon is equivalent to keeping over 600,000 passenger cars off the road permanently. However, the majority of economically feasible carbon reductions have already been achieved with few opportunities remaining.

Financially, the sector has delivered poor operating results over the past five years with average return on capital employed at -1.8%. The industry is struggling with a convergence of challenges. These include massive Canadian dollar appreciation, fibre supply instability and shortages, energy and chemical costs increases and failure to realize material pulp and paper commodity price increases over the past 20 years.

The recent plans delivered by the federal government to regulate greenhouse gas emissions have hit the sector hard with requirements for an additional 18% reduction by 2010 and effective elimination of credit for early action promised by all previous governments. The Canadian federal carbon policy is far more detrimental to the pulp and paper sector in comparison to typical policies adopted elsewhere in the European Union where the sector enjoys robust carbon credits and recognition of the benefits stemming from biomass energy. This policy situation has started to disadvantage the BC pulp and paper industry compared to competitors in Europe.

This paper serves to outline the BC pulp and paper industry in context with the development of BC's carbon reduction initiative and the new BC carbon cap and trade system. It is crucial that the P&P sector build a meaningful dialog with provincial policy makers to help implement appropriate "made in BC" carbon policy.

The sector has a number of recommendations that the BC government must consider to ensure that industry can stay competitive with all other jurisdictions.

Competitiveness Recommendations

- Begin meaningful consultation with the sector on the BC cap and trade system.
- Establish sectoral, technical roundtables to effectively provide information and policy recommendations to the government.

- Undertake a Western Climate Initiative wide, sectoral review of cap and trade proposals to ensure BC’s approach does not disadvantage BC facilities relative to other Western Climate Initiative pulp and paper mills.
- Establish BC carbon policy that improves the competitiveness of the BC pulp and paper industry by recognising the fundamental value of biomass and its carbon neutrality.
- Ensure only one regulatory scheme applies to the sector and develop an effective trading and offsets program.
- Ensure the real value of biomass generated electricity and steam is recognised under BC’s carbon policies.
- Actively engage with federal representatives on proposed carbon limits and trading instruments to protect BC business interests.
- Recognise the National Council for Air and Stream Improvement carbon estimation tool and reporting protocols.

Carbon Cap Recommendations

- Development of a realistic cap for the pulp and paper industry that
 - Recognises the massive reductions achieved and the limited future opportunities.
 - Allocates carbon limits based on intensities of different mill types.
 - Allows corporate true-up using established trading protocols and systems.
 - Recognises the true value of biomass generated electricity and steam by establishing separate biomass generated power emission intensity targets and creating policies to protect pulp and paper biomass pricing from carbon influences.

Allocation of a Carbon Cap amongst Sectors

- Development of “made in BC” allocations that
 - Recognise historical sector performance using 1990 as the baseline.
 - Recognise ability to deliver future reductions.
 - Limit restrictions of incrementality, evidence and verification.
 - Operate compatibly across Canada and the Western Climate Initiative.

Trading and Offsets Recommendations

- Development of a robust carbon trading and offsets system that
 - Allows unrestricted participation of all non-regulated business in BC.
 - Operates compatibly across Canada and the Western Climate Initiative.
 - Operates unencumbered by high transaction costs and bureaucracy.
 - Includes eligibility of forest management and forest carbon offsets.

2 BC Pulp and Paper Background

The British Columbian pulp and paper (P&P) sector directly *contributes over \$4 billion of annual economic benefit to the province*. It is responsible for employment of almost 10,000 people with annual compensation of \$1 billion, annual goods and services purchases of \$2.5 billion and annual transfers to three levels of government of about \$600 million. The sector is symbiotically tied to the sawmill industry as we provide in excess of \$1.5 billion in revenue to BC sawmills and utilize lower value timber thus improving forest harvest economics.

Our industry, while profitable and one of BC's economic bright spots in the 1980's, has fallen into a prolonged economic slump. In the last 20 years, our Return on Capital Employed (ROCE) has been significantly below the minimum expected 12% threshold.

The sector faces challenges due to the rapid appreciation of the Canadian dollar, the Mountain Pine Beetle epidemic, the melt down of the US housing market, and the extraordinary increase in the cost of energy and chemicals. Despite this poor financial performance, the industry has consistently delivered on a record of leadership in environmental performance. Since the discovery of chlorinated dioxins in the late 1980's to today's concerns over carbon, the sector has been a model of proactive, voluntary action on emissions reductions.

2.1 BC Pulp and Paper Future

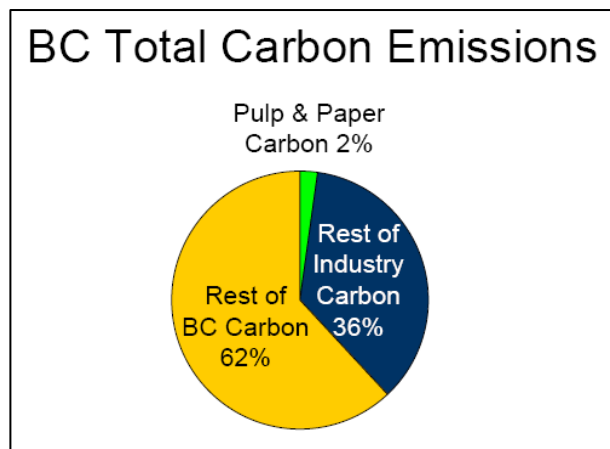
The industry is currently at a crossroads. The old business model, still entrenched in BC, is one focused as a producer of pulp and paper leaving all else as waste streams. The new business model, in competing regions such as Sweden and Finland, is one that embraces the notion of a *"bio-refinery" which produces value added products including pulp, paper, electricity, liquid bio fuels and specialty chemicals*.

2.1.1 Green Energy and Biorefining – An opportunity for Reinvestment

While other competing jurisdictions are enabling their P&P industries to re-invent themselves with incentives and policies supporting reinvestment, this is currently not the case in BC. The bio-refinery concept is one that is quickly evolving both technologically and as a platform to reduce greenhouse gases. BC's government can foster this change by studying approaches adopted in Europe outlined later in this report. The P&P industry believes that appropriate policies will result in reinvestment and re-invention of today's current industry. Revenue from carbon performance, production of biofuels and green power will provide that incentive.

2.2 Carbon Reductions Made by BC Industry

2.2.1 Absolute and intensity reduction overview



BC's current carbon emissions are estimated at about 71 million tonnes CO₂e annually with industry responsible for about 38% of the total. ***BC P&P mills contribute only about 2.2% of BC's carbon emissions*** as shown in figure 1. In fact, BC P&P mills have been world leaders in reducing their carbon footprint since 1990 as shown in table 1. Absolute reductions total 2,558,000 tonnes of CO₂e which is equal to a ***62% reduction below 1990 levels like taking 600,000 passenger vehicles off the road permanently.***

Figure 1 – BC Total Carbon Emissions

Year	Number of Mills	Total Production (t)	Total Carbon Emissions		% Reduction		Energy use GJ/t
			t CO ₂ e	t CO ₂ e/t	t CO ₂ e	t CO ₂ e/t	
1990	27	7,295,000	4,133,000	0.57	-	-	37
2006	21	7,387,000	1,575,000	0.20	62	64	22

Table 1 - BC Pulp and Paper Carbon Reductions 1990-2006

This performance is ten times Canada's commitment to the Kyoto protocol. Over the same period, while there have been mill closures, total P&P production has increased by 6% resulting in a carbon intensity reduction of 64% compared to 1990 baseline. These carbon emission reductions are widespread throughout the sector. Today, nine of the province's twenty one P&P mills emit less than one-half of the carbon that they emitted in 1990.

2.2.2 Delivering carbon reductions

Starting in 1990, Canadian governments employed a number of means to actively encourage voluntary action on the part of industry to reduce carbon. Through their involvement in the creation of such programs as the Voluntary Challenge Registry and the Baseline Protection Initiative, policy-makers at the federal, provincial and territorial levels signalled to industry that early, voluntary action would be recognized under any future mandatory regime. The P&P industry took on the challenge and went about improving its carbon footprint by 62%. These dramatic improvements have subsequently been completely disregarded by the federal government's proposed program that fails to recognize this drastic reduction or the carbon offset value of the biomass fuel we use.

BC P&P mills implemented two key approaches to achieve these drastic reductions costing approximately \$1.8 billion over the past 17 years.

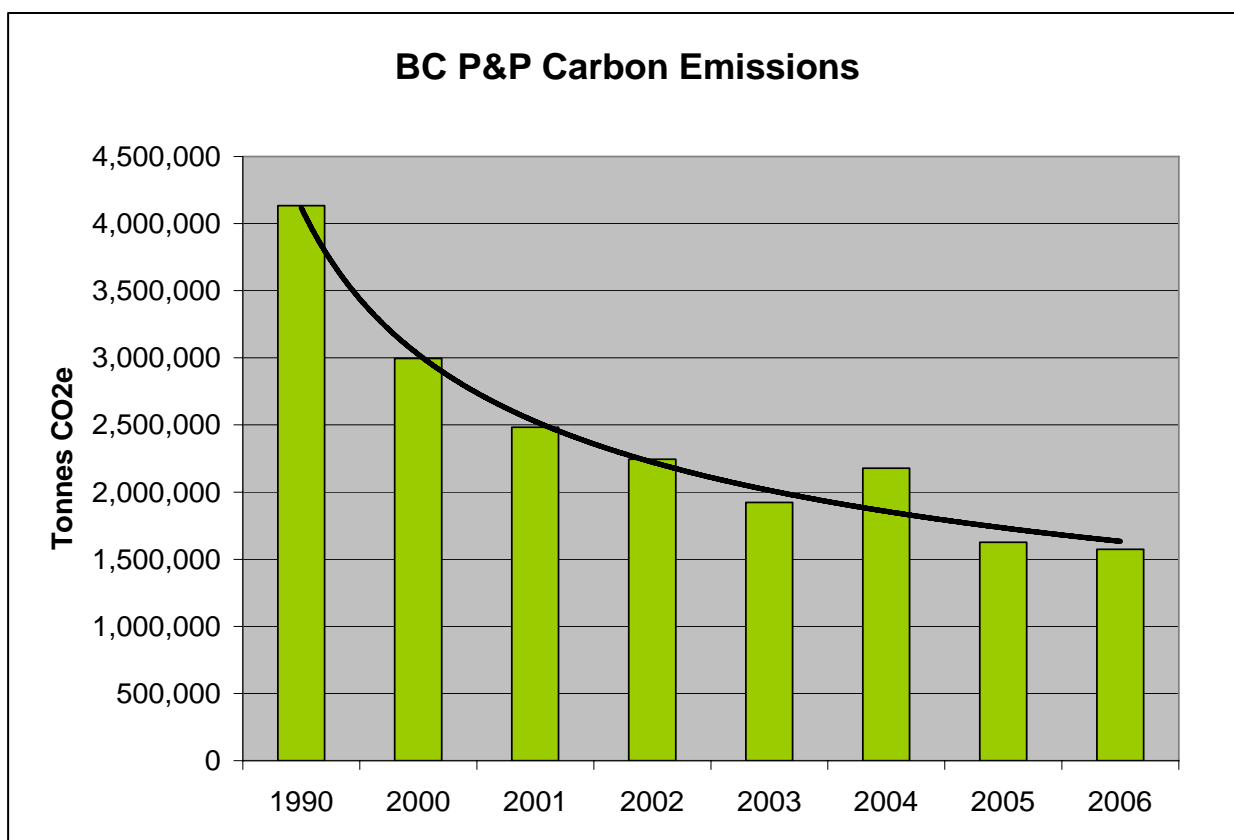


Figure 2 – BC P&P Industry Carbon Reductions Since 1990

First, facilities undertook fuel switching from high carbon intensity fuels to lesser ones. The use of heavy fuel oil and diesel were abandoned in favour of natural gas and biomass. Many facilities focused on maximizing their use of biomass fuels. Projects included closure of inefficient boilers, boiler retrofits to expand green steam and green power generation, installation of new emissions controls to allow higher biomass firing rates, and development of new cogeneration facilities that provide process steam while reducing imported power and/or contributing green power to BC’s grid. The sector estimates approximately \$1 billion dollars in capital was spent on fuel switching and biomass burning upgrades since 1990.

Second, the sector recreated its energy footprint. As shown in table 1, **average energy intensity to manufacture P&P products has dropped by 41%** since 1990 meaning the sector uses far less steam and power to manufacture the same goods today. Mills undertook process optimization and energy balance studies to better understand what improvements were possible. What resulted was a combination of major investment in new, more efficient equipment, increasing employee awareness as well as process control changes to improve energy efficiency.

For example, new pulping processes that recapture waste heat have been implemented as well as high efficiency mechanical refiners. On the process optimization side, all mills focused on reducing water, steam, electricity and compressed air through series of small projects and process changes. We also worked with BC Hydro under the Power Smart program to reduce power use in projects like the replacement of older electric motors with new high efficiency motors. Almost \$800 million dollars is estimated as having been spent since 1990 on these process optimization and energy efficiency works.

2.2.3 Predicted future reductions

The BC P&P sector submits that they have delivered the lion share of cost effective carbon reduction initiatives available to them. As such, the industry believes that *potential future reductions are limited at best to an additional 10% of absolute emissions by 2010*. As shown in figure 2, the sector's carbon emissions profile is clearly levelling off after a period of aggressive reductions driven by past fuel switching and energy efficiency programs.

2.3 Economic state of the industry

The economics of BC's P&P sector have been very difficult over the past decade due to a convergence of challenges including exchange rate, fibre supply constraints, increasing energy and chemical costs and chronically low P&P market prices.

To build a more comprehensive understanding of the economic state and competitiveness of the BC P&P industry, the reader should make a review of the two studies that have jointly been commissioned by the BC Government and the BC P&P Taskforce. The executive summaries are attached as addendums.

2.3.1 Appreciation of the Canadian dollar

The Canadian dollar has appreciated relative to the US dollar from \$0.65 exchange rate to just over \$1.10 in the past five years. This increase has *eroded Canadian P&P mills' sales revenue streams by over 65%* because all P&P products are commodities sold internationally in US dollars.

2.3.2 Wood Residuals Shortages

The P&P industry is already having difficulty in sourcing economic fibre and is concerned that the *current trends will result in further fibre shortages triggering widespread P&P mill closures* and loss of employment. BC's residual wood fibre basket (pulp logs, sawdust, waste chips and waste bark) has always been a challenge to balance. The interrelationship between P&P and solid wood sectors is a very complex one. In fact, the P&P sector recently came together on a discussion paper to highlight the risks of unintended consequences associated with the BC Hydro Biomass Call. BC Hydro and the government have delayed the biomass call to make sure these risks are adequately considered and mitigated.

The solid wood sector has been challenged by the 2006 softwood lumber agreement that now imposes a 15% export duty on all products to the US. To compound the problem, the US housing market has grown anaemic in the past twelve months with dramatic reductions in housing starts. The reduced demand and low market price for solid wood has caused the closure of a number of BC sawmills already thus restricting the supply of fibre for P&P mills. The final area of challenge is the Mountain Pine Beetle epidemic that is attacking interior pine and forcing processors to shift their businesses. The beetle attack is creating a glut of interior fibre and will likely turn to shortage in some areas by 2015 as the harvest nears completion. Fibre shortages already exist in BC impacting the industry with closures of pulp mills in Gold River, Powell River, and Squamish; closure and re-opening of the Neucel mill in Port Alice; the recent bankruptcy protection of Pope & Talbot operating mills in Mackenzie and Nanaimo, and the announced closure of the AbitibiBowater mill in Mackenzie.

2.3.3 Unintended Consequences

Moving to a carbon economy will place significant strain on BC's already challenged fibre basket. New businesses generating biomass derived green power, cellulosic ethanol production, synthetic gas and wood pellets are already competing with our established industry for finite resources from the forest. *The P&P sector is concerned that this new competition is receiving external market incentives for use of biomass as a resource when we do not receive those same instruments under the current manner of our operations.* The sector believes Canadian and BC policy must protect its fibre basket and treat all use of biomass equally.

In the Europe Union (EU), there are numerous examples where carbon reduction mechanisms have distorted local fibre markets. Since BC has yet to enable appropriate carbon policy, our fibre prices are already being impacted by EU practises. BC produces over 1 million tonnes of wood pellets annually and the sector is forecasted to grow to 3 million tonnes by 2010. This business's principal driver is export opportunities to EU markets where power plants pay large premiums to offset coal usage. The sawdust used in pellet production is an attractive raw material and fuel for P&P mills. Because of a combination of lack of fair value for green electricity generation and the carbon credit revenue received overseas, our industry cannot afford to pay the market prices of this fuel stock. Instead, pellet producers purchase BC sawdust, process it into pellets, and ship to EU electricity producers who can afford to pay the premium. This is a pertinent example of how EU policies are rippling through BC P&P because of lack of recognition of the value of using local biomass to generate thermal heat and electricity.

2.3.4 Increasing energy and chemical costs

BC's P&P sector is an energy and chemical intensive business that purchases 8.3 million MWhrs of BC Hydro's electricity, vast amounts of natural gas and specialty chemicals like acids, bases, brightening agents and mineral based fillers. The global rise in the cost of oil of almost 280% over the past five years has started to impact the annual \$2.5 billion in purchases of goods and services. The industry expects to see more appreciation in the prices of inputs it purchases reflected in higher costs of manufacture.

2.3.5 Low commodity prices

The industry continues to wrestle with finished product pricing that has shown no upward movement over the past 20 years as outlined in figure 3. Currently, northern bleached softwood kraft (NBSK) pulp pricing is slightly elevated due to the strong economy and heavy overseas demand. This premium is currently the only factor keeping much of the BC sector solvent. In stark contrast, standard newsprint demand continues to decline with reduced newspaper readership and, thus, pricing continues to drop putting strong pressure on mechanical market pulp mills.

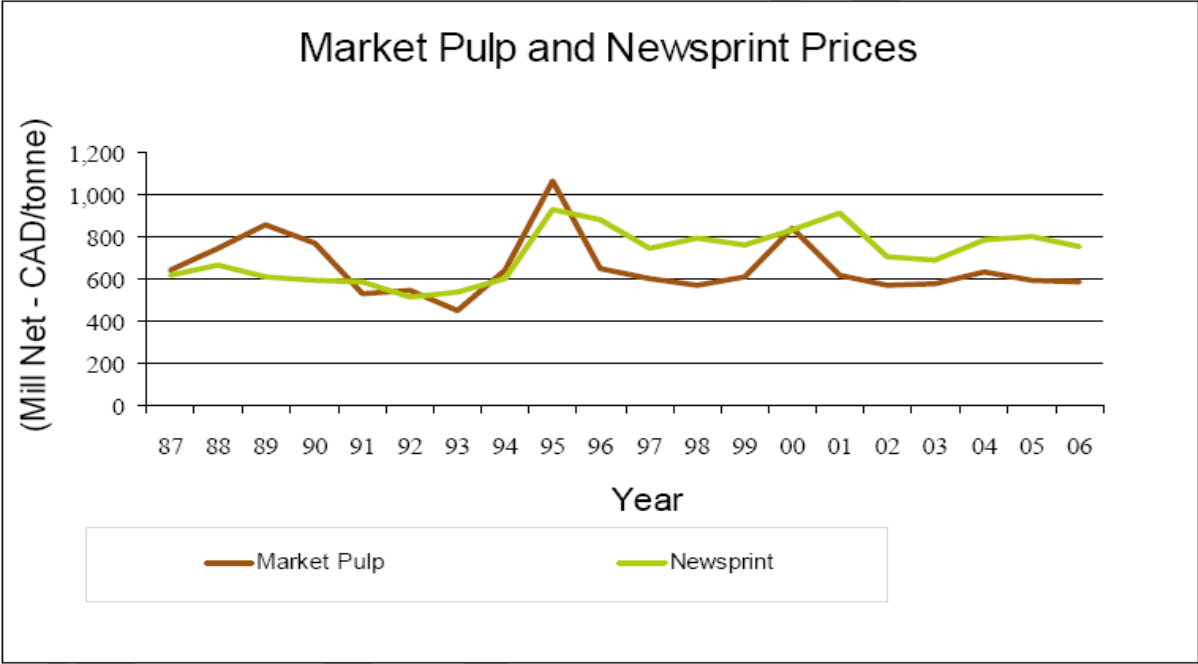


Figure 3 – Historical pricing of NBSK pulp and Newsprint

2.3.6 Non-competitive ROCE

The industry has historically delivered sub par return on capital employed (ROCE) as shown in figure 4. *In fact, since 1987, the average ROCE has only averaged 2.8% for coastal market pulp, 7.1% for interior market pulp and 4.2% for newsprint and ground wood specialty papers.* The sector’s performance is poor especially in comparison to the Canadian equity market where the TSX composite index has delivered an almost 18% average return over the past five years.

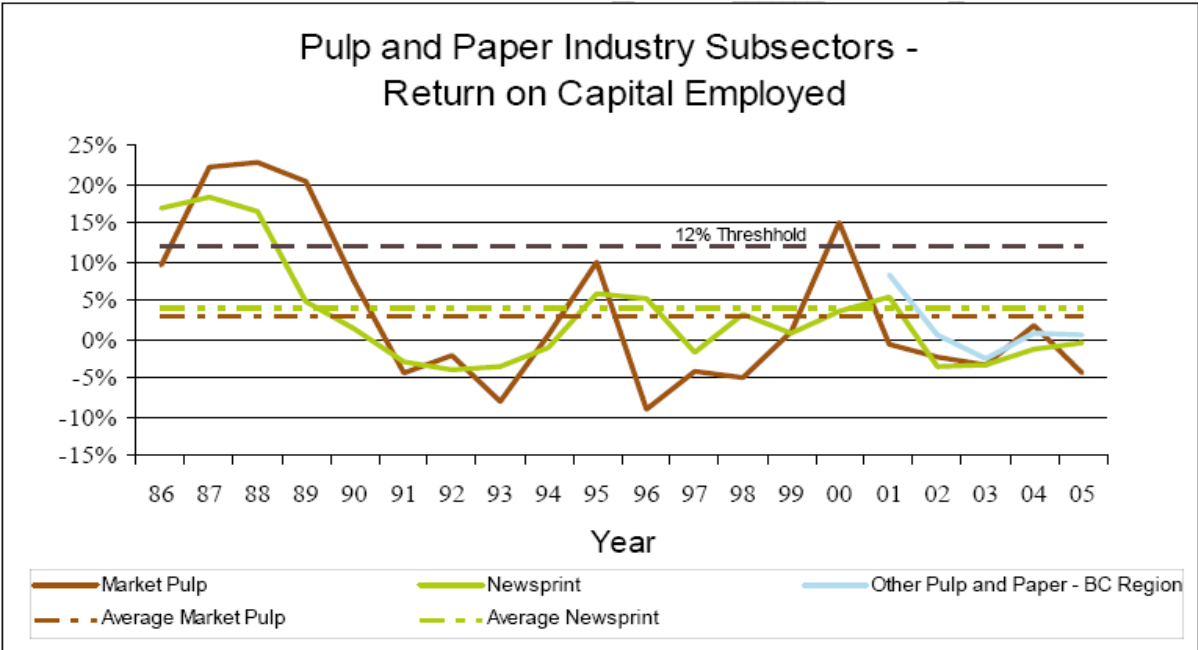


Figure 4 – Historical sector ROCE since 1986

2.4 Federal climate change initiative overview

The federal government has recently unveiled its climate change initiative under the *Canadian Environmental Protection Act* (CEPA). The legislation coming into force in 2010 will apply to all Canadian P&P mills. It establishes a 2006 carbon baseline and ***requires the sector, on average, to meet an 18% carbon emissions intensity reduction by 2010, a 26% reduction by 2015 and a 33% reduction by 2020.*** The allocation of the carbon reductions within the sector has not yet been decided but the majority of industry and the government are inclined to segregate the industry into either mechanical or chemical mills each with different reduction targets.

Federal representatives have also indicated that they are developing policy for extraordinary circumstances like the start-up of temporarily closed mills, the construction of new mills or retrofitted facilities and partial start-ups or closures. This will include tighter standards for new facilities, potentially with the establishment of clean fuel and clean production standards, that maximize biomass usage and allow use of only the cleanest available fossil fuels.

In parallel with the new carbon limits, the government is creating different ways for affected organizations to comply. Beyond in-house reductions, a technology fund and a carbon offsets and trading system are being developed. The technology fund allows for dollar contributions in lieu of carbon reductions (\$15 per tonne CO₂e in 2010) that are ultimately used by the government for deploying infrastructure or fostering research and development in the 2010 to 2017 period. The carbon offsets and trading platform provide for internal corporate trading, use of domestic carbon offsets, and international Clean Development Mechanism (CDM) credits. There is also exploration underway around potential Canada-US trading schemes.

Finally, the ***federal government has reneged on its long standing promise of rewarding early carbon reducers with credit for early action.*** Instead, there will be a limited, one time credit for early action program totalling 15 million tonnes of carbon to be shared across all sectors. All Canadian organizations that are affected by the CEPA legislation can apply for a credit for past performance using 1992 as the baseline. Government is currently considering that only discrete, large initiatives would qualify under the program rather than smaller, “business as usual” innovations that generate improvements. The P&P sector expects it will see only a fraction of its reductions under this scheme as a one time payment rather than an annual benefit. The small one time payment and no annual benefit will seriously disadvantage our industry going forward against competition operating elsewhere in the world such as Europe.

2.5 Potential Conflicting Federal Air Contaminant Policy

The P&P sector has concerns that the federal government’s new criteria air contaminant legislations may conflict with carbon reduction goals. The federal government has drafted air quality legislation that applies to the P&P sector coming into force sometime between 2012 and 2015. Under the policy, fine particulate and sulphur dioxide emissions are capped for the sector and all Canadian mills will be required to meet specific emissions intensity levels. Numerous mills that are captured in this new policy will need to spend ten of millions of dollars in capital upgrades of their emission controls to meet the new standards.

As this applies to the carbon issue, the sector is concerned that policies targeting carbon can potentially conflict with those aimed at improving air quality. The increased use of biomass

energy provides a good example as the *benefits of carbon neutrality can be at the detriment of increased particulate emissions*. Government needs to be sensitive to this fact and use these new instruments in concert to help foster appropriate policy.

3 The Need for Industry Competitiveness

In today's global markets, it is critical that industries operate on level playing fields. Experience has shown that inequalities lead to collapse and migration of business to more supportive jurisdictions. The P&P sector is a unique business that utilizes high-technology processes and controls to convert homogenous, low tech feed stocks of waste wood and biomass fuels into value added products and green power.

The EU have recognised the uniqueness of biomass and the opportunities it offers. They have also realised that the inherent carbon-neutrality of biomass will be factored into its future market pricing and that carbon premiums will be included in pricing since biomass fundamentally delivers valuable offsets. The EU have experienced the consequences of limited biomass supplies on their own markets. The situation is strikingly similar to what is likely to play out in Canada. Having recognised industry's need for competitiveness, their policies balance the existing value of biomass with the development of new uses for it.

As the EU leads the world in carbon reduction performance, policies and instruments, it is an excellent region to benchmark and study. In fact, the *Canadian P&P industry's current carbon intensity footprint is about 30% less than the average European facility* footprint although both have achieved remarkable carbon reductions as shown in figure 5.

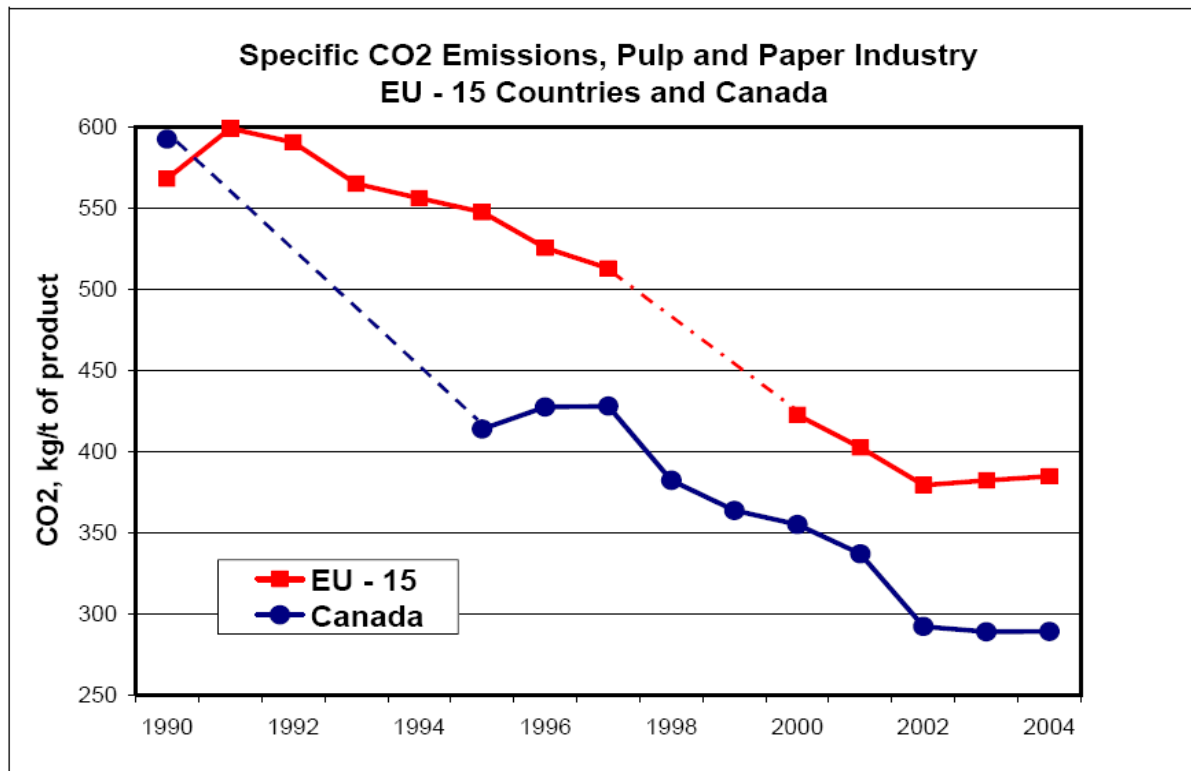


Figure 5 – Canadian and EU Pulp and Paper Carbon Intensity

3.1 EU Approach

The EU is committed to reducing its 1990 levels of greenhouse gas emissions by 8% between the years 2008-2012 under the Kyoto Protocol. All EU signatory countries are allotted first commitment period carbon credits which are allocated internally amongst their sectors. Many EU countries are using multi-faceted approaches like offsets trading, carbon and energy taxes, promotion of renewable energy and fuels, and even implementation of nuclear power.

Table 2 summarizes EU allocations of carbon to the P&P industry as absolute tonnes CO₂e and intensity. The conclusion is that *the allowable intensity given to the industry in Europe is remarkably better than what has been proposed for BC's mills under the Canadian federal government's plan* which limits carbon to 201 kg CO₂e/tonne on average. This dramatically illustrates how the Canadian industry has been disadvantaged relative to EU P&P manufacturers.

Country	Intensity allowance (kg CO ₂ e/tonne)
Sweden* (see section 3.4)	166
Canada	201
Finland	377
Germany	405
Austria	434
France	522
Italy	612
Spain	797
UK	806

Table 2 – EU and Canada's Carbon Allowances For Pulp and Paper Mills

The average EU mill with a 2004 intensity footprint of 380 kg CO₂e per tonne gained significantly under the EU trading scheme because emissions were well below allowances even in Sweden (the most stringent jurisdiction). In Canada, the 2004 intensity footprint of 290 kg CO₂e per tonne footprint has been answered with federal policy requiring that the sector meet an average intensity target of 201 kg CO₂e per tonne by 2010. This approach is more stringent than all but one of the EU countries reviewed and takes a contrary approach to rewarding early action with expectation of future reductions.

3.2 EU Offsets and Trading

To address the issue of European climate change and assist its member countries with achieving their commitments under the Kyoto Protocol, the EU has developed a multi-country, multi-sector trading scheme that involves the exchange of greenhouse gas emission allowances covering over 11,000 facilities including P&P. In essence, it is a mandatory cap and trade system.

The EU Emissions Trading Scheme (EUETS) is divided into phases for which member states must develop an approved allocation plan. These plans set an overall cap on the total amount of emissions allowed from all the facilities covered by the scheme. Carbon allowances, rather like individual facility caps, are then distributed to facilities under the scheme. Facilities are required to monitor and report their emissions. At the end of each year, they are required to surrender allowances to account for their installation's actual emissions. They may use all or part of their allocation and have the flexibility to buy additional allowances or to sell any surplus allowances generated from reducing their emissions below their allocation.

The cost of emissions allowances in the EU is to be determined by the carbon market, and demand for/availability of allowances. Additional compliance options, such as the allowable use of offsets in the scheme such as Joint Initiative (JI) or Clean Development Mechanism (CDM) project credits, will provide greater price flexibility for facilities.

The EU believes it is vital for competitiveness that emissions reduction are driven through mechanisms which do not generate unnecessary regulatory burdens, allow businesses to make their own choices on priorities, and minimise the costs of reducing emissions. Emissions trading meets these requirements and is the EU's instrument of choice for pricing carbon.

3.3 EU Pulp and Paper mills Experience

The experience of European P&P mills is borne out by table 2 summarizing sectoral allowances of carbon. In general, *EU mills have enjoyed a windfall of incremental cash flow due to their remarkable improvement in carbon emissions similar to BC facilities.* As an example, Mercer International Inc. operates one mill in BC at Castlegar and two in Germany at Rosenthal and Stendal. In 2006, Mercer realised €15.6 million (\$21.0 million) in the sale of excess annual carbon credits from their German operations. In Canada, they stand to gain an additional \$0.2 million annually in 2010 under the current Federal carbon policy requiring an additional 18% reduction. Clearly, the EU valuation of P&P carbon is stronger than the current Canadian proposal which ultimately creates a competitive disadvantage for Canadian facilities.

3.4 Swedish Policy Example

It should be noted that while Sweden has adopted the most stringent carbon allowances in the EU, it has adopted a suite of parallel policies that provide green recognition that is imbedded in biomass prices. With this incentive, Swedish biomass remained affordable to P&P mills even after biomass fuel prices were driven up by other carbon initiatives.

The tool used by Sweden to effect this change was an electricity tariff where P&P mills receive a credit of approximately \$32/MWhr for biomass / black liquor generated electricity whether it is internally used or sold to the grid. The industry does not give up any carbon offsets for receiving this benefit. The cost of this program is borne by all electric rate payers on a pro rata share of the cost based on electric consumption. *The net result of this policy has been a large capital reinvestment in Swedish P&P energy generation and conservation equipment.*

In comparison, BC Hydro offers \$3/MWhr to new producers if they sign over their new green credit offsets. The BC P&P industry receives no income from its green power attributes to offset rising biomass prices driven by the value of carbon. If a similar system was in place in BC to recognize the value of carbon neutral fuels, our industry would receive \$137 million per year based on our current electricity production.

4 Federal Equivalency and Carbon Accounting

The BC P&P industry believes its carbon performance and use of biomass energy can be a fundamental competitive advantage in the global marketplace from a low cost and green marketing position. However, there are a number of tenets required to ensure BC's approach to regulating carbon is efficient and effective.

4.1 Equivalency with Federal regulations

Policy is most effective when one government leads its development and implementation. To that end, the BC government should establish equivalency with the federal government under CEPA so that it can develop “made in BC” solutions for the climate change issue. The BC government understands local industry and its nuances best and is in the strongest position to foster sound BC based businesses. The P&P industry believes ***BC should play a greater role in the current shaping of federal policy*** to ensure that there is a consistent, single Canadian approach to carbon reductions and trading across the country that provides certainty for business. The industry urges the BC government to take a position of leadership with Ottawa to ensure that the BC P&P industry remains globally competitive.

4.2 Recognition of established carbon tools

The P&P sector has been tracking its carbon footprint since as early as 1990 using recognised standards. The BC government needs to ensure that its approach to accounting and managing carbon is in keeping with international standards and practises already in use. This is especially important to the forest industry where carbon accounting often includes both emissions and sequestration.

As an example, the sector actively works with the National Council for Air and Stream Improvement (NCASI), based in the US, in developing a carbon estimation protocol as well as emissions factors for regulatory reporting. These types of tools must be recognised as legitimate, economic approaches to developing carbon estimates. Similarly, the existing Intergovernmental Panel on Climate Change (IPCC) conventions, the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) industry protocols, and the new ISO14064 carbon accounting standards must be recognised and promoted for use in BC.

5 Pulp and Paper Carbon Cap and Trade

5.1 The Approach to Good Policy

Governments elsewhere have spent time developing an understanding of sectoral issues and markets which has resulted in implementation good carbon policy. The BC P&P industry believes that the BC government has the opportunity to develop strong “made in BC” carbon policies that reduce emissions and foster new technologies all while helping the competitiveness of existing businesses. BC P&P companies have been involved in federal carbon negotiations over the past five years and are intimately familiar with the policy and technical considerations. Further, BC P&P companies have a solid biomass base that provide low carbon energy to their operations as well as BC’s electrical grid. The BC government should establish sectoral technical roundtables that can effectively deliver information and policy recommendations to government. This approach brings industry to the discussion and helps deliver the aggressive timeline currently proposed.

5.2 Compliance Flexibility

In the arena of carbon emissions compliance, the federal government has largely set the reduction agenda and BC has followed that track with an identical 2020 target focusing on a 33% reduction. The measure of the effectiveness of the new BC carbon policies will be reflected in

their ability to foster economic reductions and new technologies while improving the competitiveness of existing business in BC.

5.2.1 A BC Carbon Cap & Trade System

Establishment of a BC carbon cap and trade system is a good idea if it is harmonized with other jurisdictions. It must be effective in delivering economic reductions and help foster new technology in the province. Equally important, the system must have an effective protection mechanism for dealing with carbon premiums on biomass price distortions that will undoubtedly continue as BC moves into a carbon economy. Trading of credits will provide an opportunity to minimize compliance costs. It is critical that a domestic trading scheme be developed to minimize the transaction costs of intra-firm trading. It is possible to establish integrity requirements that do not place unnecessary costs on such transactions.

5.2.2 Mechanics of the system

In setting the size of the P&P sector's carbon cap, the industry believes the province must consider reductions already achieved since 1990 as well as credits being allocated under any federal or provincial early action schemes. It is industry's opinion that, since our carbon performance is one of the strongest in all of Canada and BC, *we should see concessions in the size of our carbon cap allotment, additional "made in BC" allocations for past performance and recognition for the true carbon value of biomass fired electricity and process steam.*

5.2.3 Corporate True-up

Many forest products companies that operate in BC have operations in other provinces and countries. It is crucial that *the system have the flexibility to allow corporate true-up of carbon emissions* using well established trading protocols and systems like the CDM and the EUETS. It is also important that such internal balancing allow for use of offsets from operations not covered by the CEPA carbon legislation. As an example, there are numerous BC companies that operate both P&P mills and sawmills within BC and elsewhere in Canada. These organizations need the flexibility to examine and balance their carbon footprint.

5.2.4 Compatibility with Canada and the Western Climate Initiative

BC policy makers will be challenged with building trading approaches that can operate in a Canadian East/West trading regime as well as the North/South opportunity that stems from the Western Climate Initiative (WCI). A WCI wide, cross-sectoral review of pulp and paper cap and trade should be made to ensure that BC's approach does not disadvantage its mills relative to operators in Washington, Oregon and Alberta.

The BC P&P sector believes whatever system ensues should provide *maximum flexibility to help the market seek out the least expensive carbon solutions* while fostering new technology and allowing for future growth using BC's biomass supply. It will be critical to allow trading of both carbon earned through regulatory schemes or delivered as offsets through projects by organizations not covered under legislation.

5.3 Allocating Sectoral Carbon Emissions

The P&P industry has a complex emissions footprint at its facilities. Kraft pulp mills that make up the majority of BC facilities are relatively energy self sufficient by generating much of their steam and electricity from biomass energy sources. They are, however, dependant on fossil fuel

use in recycling their calcium through on-site lime kilns. Mechanical pulping mills are electricity intensive with less demand on thermal steam for process heating. Specialty facilities that handle recycled fibre or purchased pulps often do not have biomass firing capacity and as such often have the highest carbon footprints.

Figure 6 compares 2006 carbon intensity of Canadian mills showing that recycle / purchased pulp facilities have the largest intensity footprint followed by board mills, kraft facilities, and finally mechanical mills. So a “one size fits all” approach is not fair on the higher intensity operations because of their inherent processes and access to certain fibre supplies. For this reason, *the sector believes the BC government must allocate the sector’s carbon limits based on the historical performance of the different types of mills operating here.*

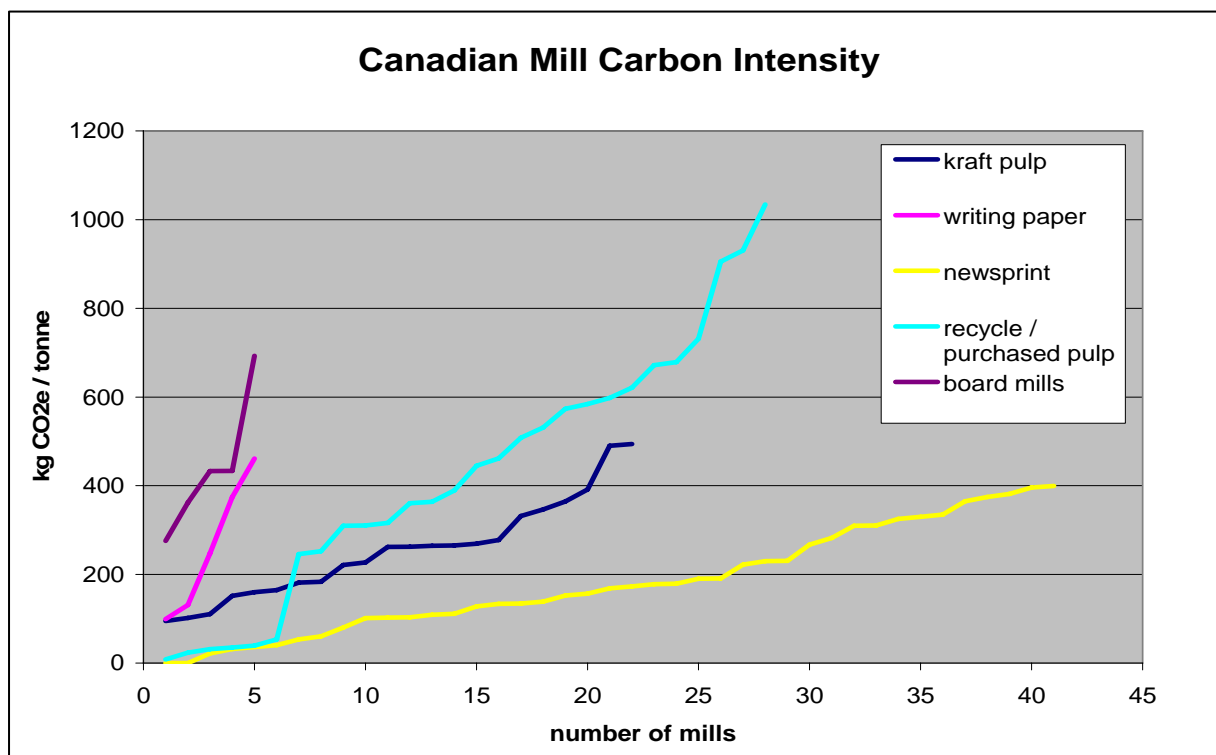


Figure 6 – Canadian Pulp and Paper Mill 2006 Carbon Intensity

The BC government must also consider its allocation in a sectoral cap as it applies to changes in operational status or ownership. The past decade has recorded numerous closures and partial restarts of BC facilities. In the future, shuttered mill sites might reopen as hybrid operations manufacturing a combination of green energy, biofuels, and pulp. This incremental carbon needs to be anticipated and accounted for accordingly. The industry’s use of biomass fuel offers the opportunity to reduce BC’s footprint but only if the appropriate policy doors are available. Cogeneration in particular is a likely candidate to reduce BC’s use of fossil fuel generated power.

5.4 Past performance and ability to reduce

The industry in BC has reduced its carbon output by 2.5 million tonnes CO2e annually since 1990. The federal government maintained that early actors would benefit in future carbon policy. In fact, that is no longer the case and the industry is being asked to reduce another 18% in the next three years bringing the total BC reduction to almost 70% by 2010. *The monetized value of*

this lost credit ranges from \$43 million per annum to \$107 million per annum based on the federal government's 2010 \$15 per tonne CO₂e price and recent EU carbon market prices. The loss of this carbon income puts the BC industry behind the rest of the world; many of whom are enjoying robust carbon cash flows. This requirement to further reduce emissions is a disadvantage to the BC sector because there are currently few reduction opportunities remaining. The incremental costs of eliminating carbon are likely to be at the federal government's price point of \$15 since BC manufacturers will be forced to buy credits on the domestic market or through the technology fund.

We recommend that a key BC objective be to establish a "made in BC" allocation that considers ability to further reduce. This allocation could minimize the extent to which early movers have been disadvantaged with the establishment of the 2007 baseline.

5.4.1 1990 Baseline

Consistent with Kyoto, the P&P industry believes that 1990 is the appropriate start date for the allocations since organizations have predicated their carbon records on that year. We recommend that qualifying entities must have realized a net, absolute carbon emissions reduction relative to this date. In allocating credits to each sector, industry believes that the reduction in emissions intensity of all regulated sectors must be compared and considered. This approach is simplest and easy to administer in measuring relative performance.

5.4.2 No incrementality test

It has been the experience of most systems around the world that incrementality of reductions can be a very difficult concept to define. The complexities of applying incrementality tests are likely to be greater in Canada's case given that it involves actions that have taken place over a period of 15 years or more. The industry believes that a simple, objective criterion applied equally to all regulated entities offer the most efficient and equitable means of determining allocation.

5.4.3 Evidence

The integrity of the allocation system means that claimants substantiate their actions taken which delivered carbon reductions. It is important to recognise that the standard of verification will need to be flexible since organizations will be documenting activities undertaken many years ago. Many P&P facilities coming under this system have experienced at least one change in ownership during the period in question which may have impacted record keeping.

5.4.4 Quantification

Numerous quantification methodologies like the WRI protocols and emissions factors like those developed by NCASI already exist and are widely used by the P&P sector. These should be accepted by the BC government.

5.4.5 Verification

In order to avoid duplication, where reductions have already been verified, no further verification should be required. For example, companies that have participated in voluntary trading (Chicago Climate Exchange) or have undertaken voluntary verification involving third-party verifiers should be exempt from additional verification.

6 Carbon Offsets System

An offset system is an efficient means of maximizing domestic emissions reductions and providing an incentive for those sectors not covered by carbon regulations to move toward a low-carbon economy. The policy rationale for allowing offsets is to harness market forces to ensure that emission reductions are made where they can be achieved most cost-effectively.

6.1 Scope

Industry believes that a *broad as practical approach* to offset system coverage is most effective. The province should aim to include as many non-regulated activities into the offsets system which we presume will operate on a level platform as part of the Western Climate Initiative. Forest sector activities are the cornerstone of BC business and should be eligible for inclusion. These activities include forest sinks like afforestation, reforestation, avoided deforestation, as well as the manufacture of wood products. In particular, the wood products sector represents an important and immediate potential contributor to the BC offsets system. Many P&P manufacturers also operate solid wood facilities and thus would have the opportunity to participate in such schemes.

6.2 Quantification Protocols

Industry believes that pre-approved quantification protocols offer an important means of reducing transaction costs in the offset system. As the Offset System Program Authority (OSPA) embarks on establishing these protocols, priority should be given to protocols already approved by other jurisdictions as in Alberta and on the Chicago Climate Exchange.

6.3 Minimizing Transaction Costs

Keeping the transaction costs associated with creating offset credits as low as possible will be critical to the evolution of carbon markets. However, it is in the first years of operation of the offset system, when quantification protocols, precedents and expertise are still being developed, that project proponents are likely to face the highest transaction costs.

We also believe that it is critical that any fees it levies not be prohibitive. As the first cohort of proponents to bring forward offset projects will almost inevitably face greater risks and costs than those that come later, there are certain “public good” properties associated with early offset projects. It would be appropriate to recognize this fact by waiving or significantly reducing any fees levied by the offset system program authority.

6.4 Forest Management

It is understandable that eligibility of offset projects would normally be restricted to those projects that affect Canada’s National Greenhouse Gas Inventory. However, an exception to this rule should be made in the case of forest management. While Canada has elected not to include forest management in its Kyoto inventory, we believe that developing an effective means of including forest management activities in the offsets system will not only contribute to carbon sequestration, it could provide a model to the international community as it reconsiders how to best account for forest carbon in a post-2012 framework.

6.5 Forest Carbon

Industry believes that BC should work to develop a model for how baseline and project credit trading can be successfully applied to forest carbon projects. With growing international attention on the importance of forest carbon and, in particular, decreasing rates of tropical deforestation to global carbon mitigation efforts, the offsets design offers a window of opportunity to develop new and more workable models for crediting forest carbon projects.

6.6 Compatibility with Canada and the Western Climate Initiative

Again, as was the case regarding the design and operation of the carbon cap and trade system, any new offsets program will have to be compatible across the rest of Canada as well as within the Western Climate Initiative. This is particularly important since many P&P operators within BC also have interests elsewhere in Canada and the rest of the world.

7 Cogeneration

The BC P&P industry self generates 4.3 million MWhrs of electricity annually. With this 850 MW of biomass generation capacity, the BC industry is already North America's single largest producer of biomass power. Estimates place the renewable portion of the energy generation at about 85%. The current development of federal carbon policy for cogeneration has been integrated with the electricity generation sector. The BC P&P industry is concerned that the interests of biomass cogeneration are not being properly considered.

7.1 Benefits of biomass cogeneration

While fossil fuel fired cogeneration can offer significant environmental benefits over other forms of energy generation, the carbon benefits of biomass fired cogeneration are even greater. This incremental benefit should be considered in the development of carbon emissions standards for cogeneration. The industry does not believe that a "one size fits all" approach should be adopted. Rather, the emissions intensity of the fuel use towards electricity and steam generation should be accounted for. We urge the BC government to ***establish a separate carbon intensity standard, applied like the sectoral targets, by which the government can recognize the full benefit of cogeneration.*** Under this approach, industry believes the true value of carbon neutral biomass can be realised in BC's favour.

7.2 Alberta Cogen model as an alternative approach

The federal government appears to be leaning in favour of the cogeneration model that has recently been developed by the Alberta government. The BC P&P sector would support this approach. The Alberta treatment targets fossil fired cogeneration facilities by applying a single carbon intensity target to all facilities whether biomass or fossil powered. ***The policy recognises the outstanding contribution biomass cogeneration makes in the reduction of carbon emissions*** by regulating fossil power generation and biomass cogeneration on the same regulatory platform. Biomass benefits from the single approach since its carbon intensity per unit of electricity is much lower than fossil fired power.

7.3 Carbon premiums on the BC fibre

The recent growth of BC based businesses generating green biomass electricity and converting beetle wood into fuel pellets has the BC P&P industry worried that it is competing with other businesses for a shrinking fibre resource. Proposed ***policy solutions could well place carbon***

premiums on waste wood fibre for some of these new business uses beyond P&P manufacturing. As an example, a generator of cellulose based ethanol may well end up receiving more federal or provincial grants or incentives to manufacture his alternative green fuel than those received currently by the P&P industry in generating biomass power and avoiding fossil consumption. The consequence of such policy will create increased demand and a price premium on the BC fibre supply. The BC P&P industry is in no position to survive any further erosion in supply or increases to fibre price.

8 Recommendations

The BC P&P industry believes the province has the opportunity to take advantage of its strong biomass resource by developing good carbon policy that fosters economic carbon reductions and development of new technologies while improving the competitiveness of existing business.

The following actions are critical in our opinion to deliver effective policy:

Competitiveness Recommendations

- Begin meaningful consultation with the sector on the BC cap and trade system.
- Establish sectoral, technical roundtables to effectively provide information and policy recommendations to the government.
- Undertake a WCI-wide, sectoral review of cap and trade proposals to ensure BC's approach does not disadvantage BC facilities relative to other WCI pulp and paper mills.
- Establish BC carbon policy that improves the competitiveness of the BC pulp and paper industry by recognising the fundamental value of biomass and its carbon neutrality.
- Ensure only one regulatory scheme applies to the sector and develop an effective trading and offsets program.
- Ensure the real value of biomass generated electricity and steam is recognised under BC's carbon policies.
- Actively engage with federal representatives on proposed carbon limits and trading instruments to protect BC business interests.
- Recognise the National Council for Air and Stream Improvement carbon estimation tool and reporting protocols.

Carbon Cap Recommendations

- Development of a realistic cap for the pulp and paper industry that
 - Recognises the massive reductions achieved and the limited future opportunities.
 - Allocates carbon limits based on intensities of different mill types.
 - Allows corporate true-up using established trading protocols and systems.
 - Recognises the true value of biomass generated electricity and steam by establishing separate biomass generated power emission intensity targets and creating policies to protect pulp and paper biomass pricing from carbon influences.

Allocation of the Carbon Cap amongst Sectors

- Development of "made in BC" allocations that
 - Recognise historical sector performance using 1990 as the baseline.
 - Recognise ability to deliver future reductions.
 - Limit restrictions of incrementality, evidence and verification.
 - Operate compatibly across Canada and the WCI.

Trading and Offsets Recommendations

- Development of a robust carbon trading and offsets system that
 - Allows unrestricted participation of all non-regulated business in BC.
 - Operates compatibly across Canada and the WCI.
 - Operates unencumbered by high transaction costs and bureaucracy.
 - Includes eligibility of forest management and forest carbon offsets.

9 Addendum #1 –

PriceWaterhouseCoopers Report Executive Summary – *Economic Impact of the BC Pulp and Paper Industry Final Report*

The BC pulp and paper industry contributes over \$4 billion annually to the economy of British Columbia. Beneficiaries of the industry include employees, communities, government, the solid wood industry and, when the industry is profitable, shareholders.

The BC pulp and paper industry provides a significant number of well-paying jobs for the provincial workforce. Directly, over 10,000 employees earn a living from the pulp and paper industry, which indirectly provides employment for some 20,000 additional people. The pulp and paper industry is estimated to pay \$1 billion annually in compensation and benefits directly to, and on behalf of, its employees. The average hourly employee in a BC pulp mill earns \$96,000 per year in salary and benefits, making pulp and paper the second highest paying industry in BC next to mining, oil and gas.

Although declining employment in the industry raises concerns about job security for existing employees, in fact employers face a significant challenge attracting and retaining sufficient numbers of skilled workers to replace aging employees.

The pulp and paper industry in BC contributes \$600 million annually to all three levels of government, which benefit greatly from the industry itself through taxes, assessments and other government revenues, and also from the employees, who contribute significantly to government revenues.

The pulp and paper sector contributes revenues to government, irrespective of whether the companies are profitable – through the federal Large Corporations Tax, provincial and municipal property tax, provincial sales tax, the pulp portion of provincial stumpage payments, and federal and provincial employee tax withholdings, CPP and EI.

Pulp and paper mills in BC are frequently located in small towns, which become economically dependent on the mills for municipal taxes and employment. When mills are operating near capacity and experiencing positive financial results, the benefits of being a mill town reach far beyond the jobs created and taxes paid. BC communities benefit from the industry's support of local activities and infrastructure.

The symbiotic relationship between the solid wood sector and the pulp and paper industry in BC helps ensure overall value is extracted from the Crown resource (timber). The pulp and paper industry contributes in excess of \$1.5 billion to the solid wood sector by consuming residual chips (by-products) from the sawmilling industry. This value-added process not only supports the sawmill companies, but also generates more work for pulp and paper employees, further payments to government by pulp and paper mills, returns to pulp and paper shareholders, and a stronger and more diversified economic base for the people of British Columbia.

Pulp and paper producers have a tremendous social responsibility to care for the air and the water on which their mills rely. According to the industry, BC pulp and paper facilities greenhouse gas emissions were 62% less in 2006 than 1990, despite increased production volumes during that period. The reduction achieved by BC mills is ten times the 6% reduction in greenhouse gas emissions by 2012 committed to by Canada in ratifying the Kyoto Accord. As reported by the industry, the greenhouse gases that were not emitted by the BC pulp and paper industry in 2006, in comparison to 1990 levels, are the equivalent of removing the emissions of over 600,000 vehicles.

Unfortunately, one significant stakeholder is not currently benefiting from the BC pulp and paper industry: the shareholders. The Return on Capital Employed (ROCE) has not exceeded 12% in any subcomponents of the industry for the past ten years, and the average for the 20 years between 1986 and 2005 has been significantly below the minimum expected 12% threshold. The industry cannot provide high paying jobs to its employees, contribute to government revenues, support local communities and purchase by-products from the solid wood sector unless it earns sufficient profits to generate a reasonable return on investment for its shareholders.

Market pulp and newsprint prices have shown little upward trend over the past 20 years, and being a commoditized industry, it is critical for BC pulp and paper operations to minimize costs and be globally competitive in order to generate positive earnings. The earnings over the past 20 years have not met the minimum threshold expected by the shareholders. Additional investment is required to upgrade the mills and achieve lower costs; however, further investment will be hard to attract without reasonable expectation of a proper return.

10 Addendum #2 –

Poyry Report Executive Summary – *Future Development of BC Pulp and Paper Industry Final Report*

Facing pressure from global competition, fiber availability and cost and the strengthening Canadian dollar, BC's pulp and paper sector is at a crossroads with respect to its future prospects. The BC Task Force requested Poyry Forest Industry Consulting (Poyry) to assist it with assessment of competitive position and economic prospects (the Study) for BC's pulp and paper sector as an early step in the process of creating hosting conditions necessary for industry renewal. The high level goal of the Study is "to establish a common language" stakeholders can use to address the opportunities and challenges facing transformation and renewal of the industry in BC.

BC's pulp and paper industry is well established in global markets and is based on a solid 'platform' of developed infrastructure and experienced personnel. Global markets continue to offer significant opportunity for a pulp and paper industry in British Columbia.

The product opportunities today are similar to those on which the industry was built in the period from 1960 to 1990. However, the current market environment and trends suggest the BC industry will need a clear focus to capture the most rewarding business and avoid weak and declining markets. Northern Bleached Softwood Kraft (NBSK) markets continue to look promising with a 1.6 % annual global demand growth. Furthermore, this sector is expected to have a healthy supply/demand balance for several years, enabling producers to achieve high operating rates and positive cash flow.

Markets for higher value magazine/catalog papers such as super calendared and coated grades also offer opportunity to producers with high quality products. Demand growth for these grades ranges from flat to 1.3 % per year and no new capacity is announced at this time. On the other hand, North American newsprint demand is declining precipitously and producers are faced with the difficult challenge of rationalizing and reducing capacity to balance supply and demand. While demand for newsprint in Asia continues to grow, an increasing portion of it will be supplied by local capacity thereby reducing the opportunity for BC producers to export to that region.

With some exceptions, the pulp and paper industry in BC is, as a whole, poorly equipped to compete in the global markets most important to it. In the past 20 years, the industry has fallen behind industries in other regions in such areas as research and development, the implementation of new technologies, government support and the formation of global companies. Today, BC's NBSK mills are high cost in terms of "delivered cost to natural markets" – especially those on the Coast. Newsprint producers in BC are also relatively high cost on a delivered basis. The recent rise in the value of the Canadian dollar has made the situation more urgent by reducing margins substantially since products are sold in US dollars.

In a global context, the quality of pulp and paper assets in BC is, today, below average and the reinvestment rate is below the level required to sustain their already weak competitive positions. A major increase in capital investment is needed to refocus and renew production platforms to achieve sustainable competitiveness. There are assets and production sites in BC, particularly in the NBSK sector, that could offer the opportunity for such reinvestment.

BC's large supply of high quality fiber remains its core competitive advantage. However, it is at risk. The ongoing pine beetle infestation will reduce interior harvest volumes by over 25% from 2005/06 peak levels, over the next 10 years. (about a 10% reduction from pre-beetle infestation levels in 2001). Much of this change will occur midway through the next decade, after which economic sources of residual fiber

will become less available. There is potentially a growing use for biomass, much of which is currently committed to pulp & paper production in BC. Bio-energy projects are being studied in numerous jurisdictions around the world, including BC. In developing new forest policy, ministry planners in BC are challenged with the complexity of balancing the needs of the current industrial user base, (pulp and paper mills), who generate much of their electrical power requirements from biomass, with a competing desire to develop an independent power industry. Done properly, there should be room for both sectors to coexist, without sacrificing one for the benefit of the other. Policy frameworks are required that can enable the pulp and paper sector to benefit from opportunities in demand for biomass based energy, such as those in place in other producing regions.

Renewal of the BC pulp and paper industry will demand the close cooperation of key stakeholders. The 4% return on capital employed achieved by the industry over the past 15 years has severely constrained the industry's access to capital. Cash flow from continuing operations must be substantially improved by intensive cost reduction, productivity improvement and the further removal of uneconomic capacity in some sectors. The changes needed may require the commitment and resources of larger companies than those that currently form the BC industry. Larger, global companies have clear competitive advantages in such areas as cost of capital, investment capacity, supply chain leverage and innovation.

In conclusion, there is a place in global markets for pulp and paper products made in BC. Renewal of the BC pulp and paper industry ultimately requires a high level of reinvestment. Investors, who have experienced very low returns for many years, will return to the industry only when conditions are attractive. Industry must work towards achieving a high level of operating and financial performance with the tools at hand. It will be important for labor and management to demonstrate to all stakeholders that they can run assets in BC at least to the level of the best performers who are operating comparable technology elsewhere in the world. The road to industry renewal likely goes through rationalization and consolidation both to balance capacity with available sources of economic fiber and to capture the resources available to larger entities. Restructuring will ensure that only economically viable assets are supported by stakeholders and reinvestment will provide a level playing field in terms of technology employed. A renewed NBSK sector in BC can be globally competitive and viable over the long-term as can a newsprint sector that is in balance with North American demand

Stakeholders must collaborate in putting in place hosting conditions that will create situations that encourage significant capital investments in BC's pulp and paper sector. Key examples are:

- Establish the industry and stakeholder forums and processes needed to drive necessary changes
- Develop and support energy policies that provide revenue incentives for biomass based energy produced by the pulp and paper sector.
- Establish a tax basis that is more in line with competing jurisdictions
- Support employee training and development at all levels, including apprenticeships, technical training, management training etc